

# AMERICAN RAILROAD JOURNAL.

## STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

### HENRY V. POOR, Editor.

#### ESTABLISHED IN 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. IX., No. 3]

SATURDAY, JANUARY 15, 1853

[WHOLE No. 874, VOL. XXVI.]

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

#### PRINCIPAL CONTENTS.

Railroads of Louisiana.....	33
Trade and Commerce of the Canals.....	34
Baltimore and Ohio Railroad.....	35
Statistics of New York.....	36
Journal of Railroad Law.....	37
Covington and Lexington Railroad.....	38
Indiana and Illinois Central Railroad.....	39
Commerce of the U. S.....	39
Trade and tonnage of the Canals.....	40
San Antonio and Gulf Railroad.....	40
Steubenville and Indiana Railroad.....	40
Hannibal and St. Joseph Railroad.....	40
Pennsylvania Railroad.....	40
Stock and Money Market.....	41
Railroads in Texas.....	42
Natural vs. Artificial routes of Commerce.....	42
Boston and Lowell Railroad.....	42
Chicago and Rock Island Railroad.....	43
Finances of Maryland.....	43
Finances of Illinois.....	43
Ericsson's Caloric Engine.....	44
General Railroad Law of Indiana.....	45
Statistics of Pennsylvania.....	46

#### American Railroad Journal.

Saturday, January 15, 1853.

##### Railroads of Louisiana.

The State of Louisiana, having in the Mississippi river a convenient channel not only for the trade and travel of its own people, but for opening to them the interior commerce of the country, has neither attempted nor accomplished much in works of artificial improvement. Before railroads were brought into use, the river afforded the best known mode of transportation, both for persons and property, and long habit had produced a conviction that it could not be superseded by any other channels or routes of commerce. No representation could awaken the people of New Orleans to a sense of the importance of following the example of other cities, and of strengthening their natural position, by artificial works, till a diminished trade—the result of the works of rival communities—rendered the necessity of undertaking similar improvements too apparent to be longer delayed. Although the projects of the northern and eastern States, by which they sought to reach the trade of the Mississippi basin, had been only partially accomplished, yet the influence which they exerted, even in their infancy, in diverting the commerce of that

great valley from its natural and accustomed channels, has been so marked and decided, that, for a few years past, the trade between New Orleans and the distant portions of the great valley has diminished—at least has not increased—notwithstanding the rapid increase of the West in population and production. Such a fact was too startling not to arouse the whole community to a sense of the necessity of taking the proper steps to avert a calamity threatening the loss of their trade and commercial importance; and the people of New Orleans are now taking the most efficient measures to repair the consequences of their neglect, and are busily engaged in the prosecution of two great works, by means of which they propose to re-establish and retain the hold they once had upon the trade of the Mississippi valley.

The leading project now engaging the attention of the people of Louisiana, and particularly those of New Orleans, is the *New Orleans and Nashville* railroad, by constructing which they propose to connect themselves not only directly with a region of country capable of supplying the largest amount of trade, but with the numerous railroads now in progress in the south and west. The length of this road will not be far from 500 miles. It will traverse, as is well known, a very fertile and productive region, and at its northern terminus, will be brought into communication by railroad with every portion of the country. It is believed that this road will exert a strong counteracting influence to the efforts now made to draw off the trade of the Mississippi valley toward other cities. The whole line is now under survey, and will be placed under contract as soon as practicable, when the work of construction will be urged forward with the greatest possible despatch.

The other leading project dividing the attention of the State with that described, is the *New Orleans and Opelousas* railroad. The object of this road is to accommodate the trade and travel of the country traversed, and eventually to form the trunk of two other great lines; one extending into Texas, with the expectation that it will eventually be carried across the continent to the Pacific; and the other in a northerly direction, through Arkansas, to St. Louis. These extensions, however, form no part of the present project, which is limited to the territory of the State.

The route of this road traverses the great sugar-

producing district of Louisiana, from which transportation to a market, on account of the impossibility of constructing good earth-roads, involves a heavy expense and great delay. For the immense products of this portion of the State, the road will constitute a suitable outlet in the convenient direction of trade. The work of construction will be commenced immediately, as ample means are prepared for this purpose.

The above are the two leading works of the state, and alone require particular description. Most of the projects that will be constructed within the State, for some years to come, will probably be based upon the above lines.

The influence which railroads are calculated to exert upon the commerce, and in this manner upon the public sentiment of a community, has been remarkably illustrated in the present condition of the trade of New Orleans; and in the extraordinary revolution which a conviction of the necessity of these works, as a means of maintaining their prosperity and commerce, has effected in the political organization of that city and the State. So long as commerce was confined entirely to natural channels, New Orleans occupied a position possessing greater advantages than any other city on this continent. She held the key to the commerce of its largest and most productive basins, watered by rivers which afford 50,000 miles of inland navigation. This basin is now the principal producing region of those articles which form the basis of our foreign and domestic commerce.

The ability, therefore, to monopolize this trade, will be the test of commercial supremacy among numerous competitors. Before the construction of artificial channels, New Orleans enjoyed a natural monopoly of the trade of the Mississippi valley.—But it has already been demonstrated that in the United States, natural channels of commerce are insufficiently matched against those of an artificial character. The progress of the latter has already made serious inroads upon a trade, to which the merchants of New Orleans formerly supposed they had a prescriptive right. There can be no doubt that this trade is to be turned toward the eastern cities, unless it can be restored to its old routes by the construction of channels better suited to its wants than the Mississippi river and its tributaries. As already stated, the people neither of New Orleans, nor of the State, could be induced to act, till

the danger to be averted became imminent. But as, in the southern States, works of the magnitude proposed cannot be executed by private enterprise, it was found, so far as Louisiana was concerned, that neither the credit of the State, nor that of the city of New Orleans, could be made available to the works proposed; that of the State from a constitutional inhibition, and that of the city because it had already been dishonored. Under these circumstances, it was felt that the first step to be taken was to remove the disability on the part of the State, and to restore the credit of the city, to a point at which it could be made available for the carrying out of plans designed to promote its growth and prosperity. Both objects have already been accomplished. The constitution of the State has been remodelled, so as to permit extension of aid to railroad projects. A much greater change has been effected, as far as New Orleans itself is concerned. Up to a recent period that city was divided into three municipalities, each having a distinct political organization. Each of these municipalities had contracted large debts, the payment of which had been dishonored. Their credits, of course, could not be made available for any works of improvement. It was seen that the proper and only course for the accomplishment of the results aimed at, was to consolidate the different organizations into one body, and pay off old liabilities by new loans resting upon the credit of the whole city. All this has been effected. The result has been magical. The credit of the city has been completely restored. The new loan, to pay off outstanding liabilities, commanded a handsome premium, and the city is now in a position to extend efficient aid to her proposed works. As the loss of her business and her credit could be directly traced to the indifference with which she regarded all works of internal improvement, she proposes to restore both by calling to her assistance all the agencies supplied by modern science in aid of human efforts, and in the creation of wealth.

*From the Albany Evening Journal.*

#### Trade and Commerce of the Canals.

The canals of this state closed on the night of December 14th, a period of 243 days from the opening, being the longest season of navigation since the completion of the Grand Inland Work. During the entire season there has been but little interruption or delay on the main artery, but on the Genesee Valley line weeks have been consumed in the repairs of the Dam at Mt. Morris, during which navigation was materially interrupted, and at times wholly suspended.

The business season has been one of universal prosperity. There was but little fluctuation in prices of any of the leading agricultural products up to late in the Fall, when a steadily improving export demand for breadstuffs caused the prices of some leading articles to advance. But take the season from its commencement to the end, it can be said that there has been comparatively but few speculative movements. The farmer has reaped a fair equivalent for his labor, the produce dealer and shippers have received a fair equivalent for their labor, and trouble and investments, and the commission merchant all that could be expected. Thus not only in this, but in nearly all other branches of trade, has a legitimate traffic been carried on.

Some weeks before the opening of navigation, the Canal Board resolved to reduce the tolls on merchandise ascending the canal about 50 per ct. This, with a few exceptions comprised nearly every thing but sugar, molasses and some unimportant

articles. The result has been a diminution in tolls to some \$200,000 less than last season, while the total tonnage shows a very large increase over that of any previous season.

The annexed tables, made up from the returns made by the collectors at New York, Albany, West Troy and Waterford, exhibits the business of the canals—the amount and value of property arriving at and departing from tide water.

The aggregate amount of tolls received on the canals this year was \$3,117,607; last year \$3,329,727—showing a decrease of \$212,120.

STATEMENT showing the total quantity of each article which came to the Hudson River on all the Canals during the years 1850, 1851, and 1852:

THE FOREST.	1850.	1851.	1852.
Fur and peltry, lbs.....	656,000	484,000	266,015
Product of woods:			
Boards and scantling, feet.....	425,095,442	427,038,600	542,996,188
Shingles, M.....	1,868,083	47,900	63,204
Timber, cubic feet.....	1,666,262	4,237,750	4,003,913
Staves, pounds.....	202,224,000	155,304,000	148,767,044
Wood, cords.....	12,411	8,726	18,642
Ashes, pot and pearl, bbls.....	52,237	29,084	37,220
AGRICULTURE.			
Product of animals:			
Pork, bbls.....	46,618	45,019	72,704
Beef, ".....	97,259	76,344	89,215
Bacon, lbs.....	6,680,000	10,964,000	9,754,790
Cheese, ".....	32,584,000	25,602,000	16,367,404
Butter, ".....	17,102,000	9,568,000	7,902,715
Lard, ".....	8,278,000	10,814,000	.....
Lard oil, galls.....	67,460	240,800	.....
Wool, lbs.....	11,986,000	10,518,000	7,645,302
Hides, ".....	458,000	572,000	763,511
Tallow, lbs.....	578,000	244,000	.....
Lard, tallow & oil.....	.....	10,787,984	.....
Vegetable food:			
Flour, bbls.....	3,256,077	3,358,463	3,464,108
Wheat, bush.....	3,670,754	3,063,666	6,754,946
Rye, ".....	472,305	288,679	279,314
Corn, ".....	3,228,056	7,915,464	5,436,769
Corn meal, bbls.....	11,983	7,065	14,174
Barley, bush.....	1,744,867	1,809,417	2,354,933
Oats, ".....	2,469,637	3,594,313	4,894,524
Bran and ship stuffs, lbs.....	402,464,000	44,036,000	60,225,603
Peas & beans, bush.....	79,515	127,500	122,849
Potatoes, bush.....	230,699	599,950	779,871
Dried fruit, lbs.....	1,468,000	1,424,000	190,504
All other Agricultural products:			
Cotton, lbs.....	1,114,000	220,000	178,392
Unmanufact'd tobacco, lbs.....	796,000	3,702,000	12,223,228
Hemp, ".....	66,000	1,160,000	1,403,122
Clover & grass seed, lbs.....	1,418,000	534,000	2,150,075
Flax seed, lbs.....	1,146,000	123,000	2,125,809
Hope, ".....	860,000	552,000	417,131
MANUFACTURES.			
Domestic spirits, galls.....	1,517,095	2,787,600	4,617,658
Beer, bbls.....	95	56	.....
Linseed oil, gal.....	908	.....	.....
Oil meal and cake, lbs.....	6,392,000	6,810,000	9,256,769
Starch, ".....	2,744,000	2,560,000	.....
Leather, ".....	7,176,000	8,204,000	6,877,815
Furniture, ".....	1,102,000	1,046,000	1,255,951
Agricultural implements, lbs.....	16,000	320,000	.....
Bar & pig lead, lbs.....	88,000	36,000	11,255
Pig iron, lbs.....	5,276,000	5,916,000	5,623,809
Castings, ".....	1,580,000	2,448,000	3,055,428
Machines and parts, lbs.....	280,000	148,000	.....
Bloom and bar iron, lbs.....	22,126,000	33,350,000	14,992,983
Iron ware, lbs.....	.....	4,000	.....
Domestic woollens, lbs.....	1,018,000	824,000	187,658

Domestic cottons, lbs.....	1,868,000	2,248,000	1,342,122
Domestic salt, lbs.....	13,164,000	12,816,000	9,817,161
Foreign salt, lbs.....	1,326,000	.....	841,122

#### OTHER ARTICLES.

Live cattle, hogs & sheep, lbs.....	1,578,000	868,000	150,119
Stone, lime & clay, lbs.....	87,916,000	86,286,000	123,497,567
Gypsum, lbs.....	6,950,000	3,242,000	17,699,240
Eggs, ".....	3,280,000	3,676,000	.....
Mineral coal, lbs.....	32,146,000	26,110,000	32,330,928
Fish, lbs.....	458,000	170,000	.....
Copper ore, lbs.....	104,000	418,000	54,697
Flint enamel'd ware, lbs.....	2,000	.....	.....
Sundries, lbs.....	94,112,000	110,392,000	109,101,402

STATEMENT showing the aggregate, in tons under the divisions as specified in the above table;

	1840.	1851.	1852.
The forest.....	947,768	913,268	1,066,980
Agriculture.....	926,048	891,420	992,932
Manufactures.....	39,669	52,302	48,267
Merchandise.....	7,105	4,580	11,610
Other articles.....	113,273	115,581	141,416
Total tons.....	2,033,863	1,977,151	2,261,063

STATEMENT showing the total value of each article which came to the Hudson River on all the Canals during the years 1850, 1851 and 1852:—

THE FOREST.	1850.	1851.	1852.
Fur and peltry, lbs.....	818,845	605,200	344,593

#### Product of Wood:

Boards and scantling, feet.....	6,365,724	7,213,226	9,329,570
Shingles, M.....	202,668	203,971	221,530
Timber, cubic ft.....	440,490	505,251	681,376
Staves, lbs.....	908,612	737,686	696,843
Wood, cords.....	60,743	53,591	93,313
Ashes, Pot and Pearl bbls.....	1,518,045	841,731	1,079,851

#### AGRICULTURE.

##### Product of Animals:—

Pork, bbls.....	512,798	663,898	1,267,292
Beef, do.....	866,789	468,054	1,034,113
Bacon lbs.....	580,922	980,956	916,950
Cheese, do.....	1,955,122	1,663,606	1,310,351
Butter, do.....	2,391,863	1,338,997	1,463,522
Lard, do.....	620,868	973,324	.....
Lard Oil, galls.....	42,506	168,537	.....
Wool, lbs.....	4,372,578	4,101,415	3,210,899
Hides, do.....	54,891	68,434	105,297
Tallow, do.....	40,524	16,976	.....
Lard, Tallow and Oil.....	.....	.....	1,175,074

#### Vegetable Food:

Flour, bbls.....	16,280,425	13,436,542	15,685,965
Wheat, bush.....	3,937,763	3,051,110	6,878,291
Rye, ".....	315,928	186,986	213,451
Corn, ".....	2,000,890	4,427,175	3,645,380
Corn Meal, bbls.....	35,949	20,172	39,688
Barley, bush.....	1,417,827	1,429,332	1,722,079
Oats, ".....	1,014,678	1,348,018	2,151,846
Bran and ship stuffs, lbs.....	927,853	352,285	550,121
Peas and beans, bush.....	89,382	141,698	149,996
Potatoes, bush.....	123,269	341,531	441,300
Dried fruit, lbs.....	132,019	114,108	15,241

#### All other Agricultural Products.

Cotton, lbs.....	153,239	23,994	18,636
Unmanufact'd tobacco, lbs.....	159,005	813,712	2,687,570
Hemp, lbs.....	4,960	75,469	91,203
Clover and grass seed, lbs.....	92,106	39,876	161,275
Flax seed, lbs.....	27,745	2,426	42,517
Hops, lbs.....	159,647	146,287	124,769

#### MANUFACTURES.

Domestic spirits, galls.....	394,301	627,406	1,040,355
Beer, bbls.....	475	315	.....
Linseed oil, galls.....	591	.....	.....
Oil meal and cake, lbs.....	79,859	85,150	120,264
Starch, lbs.....	144,054	135,732	.....



Leather, lbs.....	1,148,068	1,230,384	1,100,644
Furniture, lbs....	110,180	104,385	127,305
Agricultural im- plements, lbs....	777	15,852	.....
Bar and pig lead, lbs.....	4,300	820	563
Pig iron, lbs.....	52,769	59,158	59,758
Castings, lbs.....	47,428	73,438	.....
Machines and parts thereof, lbs.	27,895	14,931	.....
Bloom and bar iron, lbs.....	442,508	666,993	235,477
Iron ware, lbs....	.....	111	108,837
Domestic woolen, lbs.....	891,204	725,419	178,270
Domestic cottons, lbs.....	558,532	539,312	348,951
Domestic salt, lbs.	52,612	59,387	41,822
Foreign salt, lbs..	5,311	.....	433

## OTHER ARTICLES.

Live cattle, hogs and sheep, lbs....	47,349	26,100	4,504
Stone, lime and clay, lbs.....	118,482	122,000	147,892
Gypsum, lbs.....	14,946	6,475	22,840
Eggs, lbs.....	197,544	220,652	.....
Mineral Coal, lbs.	90,951	58,753	45,807
Fish, lbs.....	14,319	7,101	.....
Copper ore, lbs....	15,747	62,667	8,204
Flint enameled ware.....	240	.....	.....
Sundries, lbs....	1,823,914	2,202,985	2,050,430

STATEMENT showing the aggregate value of property which came to the Hudson River on all the Canals during the years 1850, 1851 and 1852 under the division as specified in the above table:—

	1850.	1851.	1852.
The Forest....	\$10,315,117	\$10,160,656	\$12,519,976
Agriculture....	38,311,546	36,394,913	45,112,636
Manufacture....	3,960,864	4,335,783	3,364,146
Merchandise....	563,615	329,423	3,904,790
Other articles..	2,323,495	2,706,733	2,387,096

Total value, \$55,474,637 \$53,927,508 \$67,288,376

## Baltimore and Ohio Railroad.

A meeting of the board of directors of this company was held on the 18th of December last, at which the subject of providing for the transportation over the road of the semi bituminous coals of the Cumberland region was acted upon. The remarks of the President Thomas Swann Esq., have been ordered by the board to be printed. We shall endeavor to give the substance of his argument. He states that nearly a million tons of coal could have been transported during the year if the company had been in a situation to have undertaken it.

The following list embraces the companies now applying for transportation and it comprises but a portion of those preparing to open mines in the George's creek region.

Names of Companies.	Hopper cars, per day.	Gondolas, per day.
Alleghany Mining Company....	50	..
Borden .....	30	..
Cumberland Coal and Iron Co..	150	80
Frostburg Coal Company.....	50	25
Thomas Kerr.....	16	6
Parker Vein Coal Company....	30	10
Jamer Percy.....	20	..
Percy & Co.....	8	8
Phoenix Coal Company.....	10	..
Swanton Coal and Iron Co.....	15	..
Withers Mining Company.....	30	..
	409	129

The receipts of the company are now about \$35,000 per month from coal. The Cumberland Coal and Iron Company, with a view to the enlargement of their trade, are investing \$100,000 in barges and propellers to ply regularly between this city and New York.

The Parker Vein Company, it is understood, are also constructing ten steamers, with a view to facilitate the transportation of their coal, to the Northern and Eastern markets. The applications submitted to the Board, are believed to be from parties

who are reliable, and who express their willingness to enter into security for the constant employment of the power which may be placed at their disposal.

The first thing to be done, will be to order a second track for much of the distance between this and the coal fields. This is to be disposed of by the board before they begin to talk of supplying the wants of the trade.

If the trade exists, it is our duty to provide for it. We should be blind to our interest, to disregard the applications that are now pressing so earnestly upon us.

The total outlay to accommodate a trade of 600,000 tons inclusive of what we now have, would not, it is believed, exceed \$1,500,000, that is to say, for second track, cars and machinery, in addition to your present stock.

The whole interest upon this outlay would be \$90,000, and your gross receipts from coal alone would be increased to say \$1,000,000 per annum.

If on a gross revenue of last year of \$1,325,563, the stock stood within a fraction of its par value and the bonds above par. it is believed that the iron for a second track could be negotiated for in bonds of the Company at the present market prices. The possession of such a trade must add to the credit of the company and their ability to procure the necessary means.

The following is the view taken by Mr. Swann of the proper course to be pursued by the company.

Assuming the first of April as the day on which the road will be in the fullest operation, I would respectfully suggest that the action of the board, under the resolution of the 5th of October, 1847, authorizing the appropriation of the net earnings of the road towards its construction, be rescinded after that day, and that a dividend of the earnings from the 1st of October to the 1st of April be calculated in stock as usual with the understanding that all future earnings from that time will be divided in cash.

With a view to the gradual liquidation of the funded debt of the Company, I would suggest further, that whenever the net revenue shall exceed 7 per cent., a sinking fund of one and a half per cent., provided the excess shall admit of it, be reserved to meet the obligations of the company as they mature.

If this road succeeds, as we have reason to hope it will do, the coal trade alone may soon be increased to a million tons per annum, and the general trade in western produce may require large additional expenditures for both power and second track.

Of the amount of debt which has been enumerated, a very large proportion, that is to say \$3,200,000, is a perpetual loan to the company, and may be treated as a preferred stock, paying a regular interest to the State, at a rate not exceeding 6 per cent.

The residue will comprise the various classes of bonds, applicable to construction, viz:

\$1,000,000 Bonds payable in 1867.
566,666 Bonds payable in 1, 2, 3, 4 and 5 years from January, 1855.
1,128,500 Bonds payable in 1875.
700,000 Bonds payable in 1880.

\$3,395,166

The whole amount of these various issues is less than the first mortgage of the Erie road.

The balance now to be added, in order to meet the increased cost to bring the road into use, is \$600,000.

If in funding this balance, we include in the same issue \$1,500,000 for second track and additional cars and engines for coal trade, we have a total of \$8,695,166,—to which is to be added, say \$1,000,000 for cars and machinery previously ordered for the general trade.

The total debt of the company would then be, say \$9,695,166, and the annual interest about \$600,000, or \$50,000 more than was estimated in the annual report.

Against this, on the other hand, the company would have a road 380 miles in length from Baltimore to Wheeling, which, with the Washington Branch, 40 miles more in length, yielded last year

a gross revenue of \$1,674,225 42, the main stem being in successful operation only as far as Cumberland, 179 miles. To what extent this great revenue is to be increased by a complete connexion with the Ohio river, is left to those who may understand as well as I do, the resources of that productive region, to which our attention has been so long directed, and which furnished the paramount, for the commencement of so stupendous a work. The power which has been heretofore provided for, upon a call of the General Superintendent, will be competent, upon his calculation, to yield a revenue of \$4,000,000 upon the basis of the tariff, which has been adopted by the company; and the addition now called for to accommodate the coal trade, will greatly increase this estimate. The company may well be content with far less flattering results than are here indicated; but they would not have been justified in cramping their ability within any narrower limits in view of the temptations which this road must offer to the West and the great valley of the Mississippi.

The million loan of the Washington Branch which I have not included in the above exhibit, will be due on the 1st of January, 1854. The whole Amount outstanding is now reduced to \$756,340 97, against this debt the company owns in that Branch 10,168 shares of its Capital Stock. The policy of the company has been heretofore, to appropriate, besides the interest upon the Sinking Fund, which now amounts to \$243,659 03. \$20,000 per annum, which in the course of fourteen years, if persevered in, would cancel the entire indebtedness of the company on this account.

The stock has been sold, within a short time, at 111 per cent. in this market.

It seems to me advisable that the company should endeavor to make some arrangement by which they would be able to leave this debt, so amply secured, to the gradual operation of the Sinking Fund.

With a view to such arrangement, it is recommended that the Committee on Finance be authorized to extend the time, to such period as they may deem advisable, say for a term of twenty years, during which the operation of the Sinking Fund above mentioned will have extinguished the entire debt.

The advantage to the company of such an arrangement would be, that it would effectually provide for the whole indebtedness on account of the Washington Branch, within a period of fourteen years; and leave the company, at the expiration of that time, with the means of liquidating at least a million more of its funded debt.

If we deduct the \$3,200,000 Sterling Bonds which I have treated as a preferred stock, from the aggregate of the company's indebtedness, say \$9,695,166, we should have \$6,495,166 only to be provided for, payable mostly at long dates; and in fourteen years the stock in the Washington Branch being released, by the operation of the Sinking Fund, would virtually reduce this amount to \$5,495,166.

Having marshaled the obligations of the company in the manner proposed, my purpose would be to provide some system of gradual liquidation, as before stated, by a moderate sinking fund, to be retained out of the excess of net earnings over and above seven per cent. This would be necessary to assure the stockholders of the extinguishment of the debt which now limits their dividends to less than the net earnings of the company by the amount subtracted for the payment of interest.

The first thing to be cared for is the road. If this be protected by a judicious system of repairs, the stockholders may calculate on dividends; but without timely precaution and liberality in this branch of the service, it would be useless to indulge in speculation upon any thing like uniformity in the net earnings. The cost of keeping a road in proper condition is to be estimated by an average of years; and to divide your whole net earnings, without reference to the contingencies to which all roads are subject, and without provision for them, would be as unwise as it would be unjust to the stockholders.

No board have a right to make a dividend unless they have fairly earned it; and if the operations of the year show a deterioration in the character of your work, with the certainty of its becoming

worse without an extraordinary expenditure, it is evident that no dividend is earned until this is provided for. To guard against contingencies I would further recommend, as the settled policy of the company, the appropriation of a small amount annually for the purpose of keeping the road always in the best condition.

After a full discussion of the whole subject, the board unanimously passed the following resolutions, looking to a somewhat larger provision than that contemplated by the President:

Resolved, That it is expedient to lay down, without delay, such extent of second track, as may be necessary to give full accommodation to the trade of this road—to be finally decided upon by the Committee on Construction and Repairs.

Resolved, That the Committee on Finance be instructed to carry out the views presented in the remarks of the President, in such manner as they may deem most advisable for the interest of the company, by an issue of bonds not exceeding \$2,500,000, to fund the balance necessary to close the account of construction and to provide for laying down a second track at such points as in the judgment of the General Superintendent, with the advice of the Committee on Construction, it may be deemed advisable; and to supply the power necessary to accommodate the Coal trade.

#### Statistics of New York.

The Message of Gov. Seymour contains a variety of useful statistical information connected with the public interests of the State. The following statement is derived from the Report of the Commissioners of Emigration.

The whole number of aliens who arrived at the port of New York, since May 5, 1847.....1,336,960  
Number arrived during last year up to December 15th..... 295,272

The number of banks, banking associations and individual bankers doing business in this State on the first days of December, 1851 and 1852, were as follows:

	1851.	1852.
Chartered banks.....	72	70
Banking associations...	95	118
Individual bankers.....	77	89
	244	277

The bills issued by the banking department to the free banks amount to \$19,159,056, being an addition to the amount held by them on the 1st December, 1851, of \$3,488,052, and an increase of \$7,978,381, within three years. The free banks have within the same time, about doubled in number.

The actual circulation of all the banks, as shown by their quarterly reports, in September, 1851, amounted to.....\$27,254,458  
1st December, 1852, to..... 38,790,985

On the subject of railroads, the Governor states: Twenty-seven corporations only have made returns. Three other corporations, which made returns last year, have not yet filed the annual reports required by law.

There have been filed in the office of the Secretary of State, articles of association for 41 additional railroad corporations. Several of these roads are known to have been completed, and upon others large expenditures have been made. The railroad corporations are by law required to file their annual reports with the State Engineer by the 1st day of December. None of them have complied with this provision, and the late date at which many of them were sent in, delays the State Engineer, and prevents him from complying with section 103 of the general railroad law, which requires him to arrange the information in a tabular form, and to report to the legislature on the first of its session.

The number of miles in use on the 27 roads reported is.....1,797  
And adding the lengths of three roads not reported, as given last year, makes.....2,027  
This is an increase in the number of miles in use, over the number reported last year, of. 297

The total cost of the 27 roads reported up to 30th September, 1852, is \$82,812,160 63.

The total expenditure on all of the roads constructed and commenced in this State, is probably about one hundred millions of dollars.

The number of passengers carried in cars on 21 roads reported, is 7,061,909; and the number of miles travelled by the passenger is 332,847,667.—The increase on 18 roads, over the preceding year, was, of passengers, 1,487,087, and of miles travelled, 92,858,860. The number of tons of freight carried over 21 roads reported, is 2,060,379. The increase over the preceding year on 17 of these roads, is 821,101 tons.

The number of persons injured in life or limb on 26 roads reported is 256; of whom were killed 158. The increase over the preceding year, on 25 of these roads, is, of persons killed, 59, injured, 44.

These railroads traverse almost every county in the State. There are no sections of its territory which have not now cheap and convenient avenues to market, by means of lakes, rivers, canals and railroads. The recent extension of the last named improvement, will rapidly increase the wealth and population of the State.

In reference to the State canals, the Governor, while avowing his opinion to be in favor of their enlargement, proposes to effect it by an application of the annual surplus tolls to this object.

Before the year 1835, the State of New York had built 656 miles of canal, connecting the Hudson river with the Erie, Ontario, Cayuga, Seneca and Crooked lakes; and with the valleys of the Chemung and Susquehanna rivers. This great system of internal improvement cost only \$11,652,652 96. Its first and greatest enterprise, the Erie canal, was commenced in 1817. It traversed a vast extent of dense forests and pestilential swamps. Great numbers of laborers were disabled or destroyed by the diseases incident to uncultivated low grounds; the contractors, without the facilities now enjoyed, in many instances without the convenience afforded by common roads, were obliged to overcome the numerous obstacles with which they had to contend, unaided by experience. Yet this great work, 364 miles in length, connecting Lake Erie with the Hudson river, cost only \$7,143,789 86.

Subsequent to 1835, there has been expended on the canals \$25,215,000, besides \$9,477,000 paid for interest.

After reviewing the law of 1851, proposing to raise nine millions of dollars for the completion of these works, and expressing his conviction of the impolicy of borrowing money generally for this purpose, Gov. Seymour goes on to say,

The honor and interest of the State of New York require the completion of the Erie canal enlargement, and the Genesee Valley and Black River canals. These enterprises have lost none of their importance. Their completion is demanded as soon as is consistent with a judicious and economical application of money. The amount needed to finish the Black River canal and improvement, is \$248,784; to complete 13 miles of Genesee Valley canal is \$389,000. Upon the Erie canal, the locks, aqueducts and other structures, which determine the future size of the enlargement, are mostly completed. The work which remains to be done is principally the adaptation of the channel work to the size of these structures.

The Canal Board have directed that the old locks between Port Byron and Rochester shall be lengthened and widened, and contracts have been made to have the work done during the suspension of navigation, so that they may be brought into use by the 1st of June. When this is accomplished, a boat of the dimensions adapted to the enlarged canal, can go from Lake Erie to the Hudson river. When the new locks upon the Oswego canal are finished, the same class of boats can also be used upon that route. The mistaken impression prevails, that the work which has been done upon the enlargement is useless until the entire enterprise is completed, and this is frequently urged as a reason for making a debt to complete it at once. This is not so. The improvements already made have doubled the capacity of the canal. When it was first built, the boats used upon it carried, on an average, less than 40 tons.

The av. tonnage of boats built in 1844 was 64 tons.

"	"	"	1845	67
"	"	"	1846	73
"	"	"	1847	76
"	"	"	1848	74
"	"	"	1849	76
"	"	"	1850	80
"	"	"	1851	87
"	"	"	1852	90

The application of surplus revenues, and some small appropriations made before the adoption of the Constitution, have increased the capacity of the canal nearly one-half since 1844; and when the locks are lengthened next spring, it can be navigated through its entire length by boats of the largest contemplated size, carrying 120 tons. Boats of this size are now used between Rome and Albany, and between Buffalo and Rochester. It appears from examinations made by the State Engineer, that with an expenditure of about \$400,000 in addition to the work under contract, the water can be deepened so that the new boats can carry 150 tons, or four times the original tonnage. Only \$200,000 of this amount will be expended for purposes that are temporary, or that will not advance the enlargement. The work under contract for enlarging the locks, will make this improvement of the channel way indispensable. Without it, the wedging of boats will prove a serious difficulty.

If one million of dollars can be expended annually upon the unfinished public works, the lateral canals will soon be finished, the enlargement constantly improved from year to year, and the boats hereafter built can soon carry their full loads of 240 tons.

To meet this annual expenditure of one million dollars, it is supposed that it will require \$500,000 to be raised from other sources besides the surplus tolls.

The total number of boats navigating the canals of the State is estimated at 4,000, and their value at about \$3,000,000.

The report of the Comptroller of the State shows that the charges on the General Fund exceeds its revenue for the year ending 30th September, 1852. Amounts drawn, etc., on the treasury, \$1,341,821 16  
Amount of receipts, etc..... 1,153,477 63

Deficiency..... 188,343 53

The State debt is as follows:

Amount of the General Fund debt..	\$6,389,693 32
Amount of the Canal debt.....	15,501,109 16
Canal revenue certificates under law of 1851.....	1,500,000 00
Contingent State debt.....	933,036 16

Total debt of the State, absolute and contingent, including the Canal Revenue certificates, which are not regarded as a part of the actual debt of the State..... 24,323,838 64

The estimated revenue applicable to ordinary expenses for the current year is.....\$789,840 00  
The estimated expenditures..... 811,835 10

The following table shows the debt authorised and contracted since the adoption of the Constitution:

1848, chap. 216, for completion of public works.....	\$489,319 34
1849, chap. 225, for completion of public works.....	385 000 00
1849, chap. 232, for canal damages....	200,000 00
1849, chap. 228, for canal repairs.....	50,000 00
1849, chap. 200, for purchase of Albany Basin.....	192,643 98
1851, chap. 501, to enlarge Oswego canal and locks.....	200,000 00
Actual debt contracted.....	1,517,433 32
Authority under chapter 501 above, to borrow.....	200,000 00

Debt contracted and authorised.....1,717,433 32

The following table exhibits the debt and expenditures on the canals, from the books of the Canal Department:



## CANAL DEBT.

Erie canal enlargement.....	\$8,127,386 94
Oswego canal enlargement.....	200,000 00
Chemung canal.....	193,452 34
Chenango canal.....	31,362 00
Black River canal.....	408,011 35
Genesee Valley canal.....	3,084,623 38
Oneida river improvement.....	59,843 56
To provide for deficiencies under art. 7 of the Constitution.....	3,153,844 10

Amount of the canal debt chargeable upon the Sinking fund created by § 1 art. 7 of the Constitution.....\$15,258,523 67

To provide for extraordinary repairs, chap. 370, § 2, Laws of 1849..... 50,000 00

To Albany basin, chap. 200, § 3, laws of 1849..... 192,585 49

Total amount of canal debt Sept. 30, 1852.....\$15,501,109 00

Canal revenue certificates, 6s, 1861.....\$1,600,000

Canal rev. certificates, 6s, 1866..... 500,000

Total of canal debt and revenue certificates.....\$17,001,109 16

## REVENUES AND EXPENDITURES OF THE FISCAL YEAR.

Statement of the revenues of the State canals, and the expenses of collection, superintendence and ordinary repairs during the fiscal year ending 30th September, 1852. (Art. 7, § 1, of the Constitution,) by the Auditor of the canal department.

## Receipts.

Tolls from canals.....	\$3,116,321 23
Tolls from railroads..	56,901 26
	\$3,173,222 49
Rent of surplus water.....	1,635 00
Interest on current canal revenue, etc	4,288 29
	\$3,179,145 78

## Payments.

For repairs on canals, viz:	
To superintendents of repairs ....	\$809,457 99
To canal commissioners. 126,132 83	
	\$935,584 82
For expenses of collection of tolls, etc.	
By collectors of tolls.....	\$62,467 38
By Weigh-masters... 7,076 93	
	\$69,544 31
For tolls refunded.....	12,300 93
For printing.....	8,973 32
For salary of Auditor and clerks of the canal department.....	7,066 51
For miscellaneous payments.....	15,576 03
	\$1,049,045 92

"Surplus revenue.".....\$2,130,099 86

Amount set apart by article 7, of the Constitution, to pay the interest and redeem the principal of the State debt, and for the support of Government, viz:

For that part of the debt called the canal debt, (§ 1.).....\$1,300,000 00

For that part of the debt called the general fund debt, (§ 2.)..... 350,000 00

For the general fund, to pay the necessary expenses of government, (§ 3.)..... 200,000 00

The "remainder of the revenues" of the fiscal year, applicable to the completion of the Erie canal enlargement, Black River and Genesee Valley canals.....\$380,099 86

## Journal of Railroad Law.

## LIMITING LIABILITY.

An important decision upon the limitation of the responsibility by contract of common carriers, was lately given in the English Court of Common Pleas, Easter Term. It was an action upon the case, in which the declaration alleged that the defendants were proprietors of certain railways, and possessed of certain carriages for the conveyance of horses, etc. The declaration then alleged that the defendants received of the plaintiff divers horses to be conveyed upon their road according to the known course of trade, except so far as the same was altered by certain terms expressed in a ticket prepared by the defendants and delivered to the plaintiff, in which it was stated that "the plaintiff should bear all risks of injury by conveyance and other contingencies; and that the plaintiff was to see to the efficiency of the carriages, and that the defendants were not to be responsible for any damages however caused." The declaration further alleged that by the gross negligence of the defendants in not greasing the axles, the car took fire, whereby the horses were injured, to the damage of the plaintiff, etc. The jury upon the facts proved rendered a verdict to the plaintiff for £60, whereupon the defendants moved for judgment upon points of law. Crosswell, Justice, delivered the opinion of the court, stating that at one time the disposition in the English courts was to hold that common carriers could not by their notice shake off the responsibilities cast upon them by the common law. His Lordship then cites American authority (Story on Bailment) to show that the opinion had been overruled, and the opposite fully recognized and settled beyond any reasonable doubt in England. The rule to arrest the judgment was made absolute.

## VALUE OF LIFE.

To ascertain and estimate the value of lives in cases of the victims of accidents by railway and the like, is one of those duties which especially demand the exercise of sound discrimination on the part of juries. If verdicts are too lenient, the negligence of engineers is unchecked; if they are too severe there will be a reaction which will afford impunity to the guilty.

The case of *Keats and others, vs. the London, Brighton and South Coast Railway Co.*, lately brought in the English *Common Pleas*, in order to recover damages in consequence of the loss of a life, shows that in matters of this kind it must be often necessary to consult men of surgical science, and its features are otherwise peculiar.

The deceased, in the above mentioned case, was a tailor doing a considerable business at Portsea. He came up to London in March, 1851, to see a Miss Richards, to whom he was engaged to be married, to consult Dr. Elliotson concerning spitting of blood with which the deceased had lately been troubled, and also to buy goods. Having accomplished his business he proceeded home by the defendant's railway.

On crossing the bridge over the Avon, the engineer, regardless of signals, drove the train into a luggage car coming in a contrary direction, and upset the carriage in which deceased was riding, down a bank. The fireman was killed, and the engineer twice attempted to commit suicide after the accident happened.

The deceased was bruised on the right temple,—lost his eyesight,—and was also injured on the right side and between the lower left rib and the thigh. He was taken home, where he died in a fortnight, leaving four children of the ages of 11, eight, five and three. He had been a widower about two years and was 37 years of age.

Miss Richards was produced as a witness, and in order to guide the jury in forming judgment as to the health and constitution of the deceased as indicated by his appearance, she was permitted by

the court, after strenuous opposition, to exhibit his portrait. It turned out, on cross examination, that before the accident, the deceased had been troubled with spitting of blood, and in October 1850, had an attack of apoplexy. Dr. Engledine, of Portsmouth, his regular medical attendant was not called by the plaintiff as a witness, because Dr. E. had been employed by defendants to attend upon the deceased after the accident, and was somewhat suspected as being in their interest.

Dr. Elliotson testified that but for the accident, the deceased might have lived many years, and read a letter concerning his health addressed by himself (Elliotson) to Engledine on the day before the accident. The purport of the letter was as follows:

"I can discover nothing wrong in the state of Mr G's lungs, but his heart beats violently. It may be in the first stages of enlargement, or this symptom may arise from excitation. The excessive action is best felt by applying the stethoscope an inch or two to the right of the left nipple. There is also a faint grating sound in the situation of the valves of the left ventricle of the heart, and as I detected it nowhere else I fear that it is connected with those valves. It is heard best when he has made a long inspiration and defers expiration. The hæmorrhage began at that moment. Perhaps, by abstinence from distilled and fermented fluids and coffee, and from exertion of the voice and muscles, he may get right in time. Abstinence from animal food would also aid him materially. I rarely eat meat now, and like many I know I do very well. I should think treatment should consist in avoiding all causes of congestion and excitement. If some of the valves are organically injured they may go on from bad to worse.

Mr. Garrington testified as the result of the post-mortem examination, that there was some recent congestion of the lungs, apoplectic symptoms in the brain, enlargement of the heart in size and weight, and inflammation of pericardium. The cause of the death was most likely the railway accident.

Mr. Adams, Surgeon of the London Hospital, testified that the ailments of the deceased did not, in his opinion, occasion the death, nor preclude the idea of his life being protracted for many years.—In insuring his life he might demand an enhanced premium.

Dr. Billings, author of a work on the heart, gave similar testimony.

The value of the deceased's business was £800 a year.

The Lord Chief Justice charged the jury, that they must under the act of Parliament, by authority of which the action was brought, render no damages by way of a solace to the wounded feelings of the children of the deceased, but simply as a pecuniary recompense for the loss of his care and protection. They must consider what was the income of the deceased, how long he was likely to enjoy it, and what were the damages sustained by the children severally.

The Counsel agreed to divide the damages equally among the 4 children.

The jury rendered a verdict for the plaintiff, for £2,000.

The case of *Charlotte Williams executrix vs. the New York and Harlem railroad company*, lately tried before Judge Oakley in our Superior Court, is somewhat analogous to the case above cited.

There was much controversy as to the speed with which the defendants were going. The Counsel having summed up, the Chief Justice charged the Jury, citing the law of the State, and the ordinances of the city, which prohibit all vehicles, whether railroad or other carriages from going at a greater speed than 5 miles an hour, and to turn the corner at a walk; a provision, said his Honor, which is

to all practical purposes, such a dead letter in the city, that it might as well be a blank piece of paper; and yet it is a truth, which our every day experience verifies, that all the accidents arise from inattention to the law. This man unquestionably, lost his life, and his widow brings her action, and she is entitled to recover exactly in the same way as Williams would have been if he had lived, only that she is limited to a recovery not exceeding \$5,000. If the agents of the defendants are guilty of negligence or want of care, they are liable, unless it shall appear that Williams contributed to his injuries by his own want of care. A passenger in the street must not be negligent of his own safety; if he does, he cannot turn round and charge another with causing his injuries. If both are in fault, neither can recover. If a carriage or car goes at a greater speed than is allowed by law, that is an abuse on their part, but it does not exonerate others from taking care to avoid danger. A railroad acquires no special right to the use of the street by laying its rails therein, they must use the streets like all other citizens. Neither is it strictly right to say that any citizen has the same right as the railroad company to the use of the street. A citizen may get his carriage on the track and stop the way of the railroad car altogether because the railroad car cannot turn out as any other carriage, but must keep in one continued line. The only question is, whether the deceased acted with prudence, and the Court does not think that his having crossed the railroad track should defeat the right of the plaintiff to recover. With respect to the damages, his Honor said the Jury must observe that the law gave these damages solely as a pecuniary compensation to the widow and children of the deceased. The money could not be taken to pay the man's debts. As to the amount, that was for the Jury.—There were cases, undoubtedly, where the pecuniary loss might be small, such as a very drunken or dissolute husband or father. It might actually be a relief to get rid of him. But in this case it was proven that Mr. Williams was a sober, honest, industrious man, and his death, without doubt, was not only a heavy loss in a pecuniary sense, but a very great calamity to his family. The Jury awarded \$2,300 to plaintiff.

#### Exhibit of the Covington and Lexington Railroad Company.

The first act of incorporation of this company was granted by the Kentucky legislature in 1847, but was so unacceptable that no organization was effected under it. In 1849 an amendment was obtained repealing the obnoxious provisions, and granting powers which made the charter one of a very liberal character. The capital was \$1,000,000 with the privilege of increasing to an amount sufficient to complete the road.

The charter authorized the construction of a railway, with single or double track, from Covington to Lexington, and to any town or place in any of the counties through which the road may pass, or in any adjoining county, and to charge on all goods, merchandise and other property transported thereon a sum not exceeding  $\frac{1}{4}$  cents per mile for toll, 5 cents per ton per mile for transportation, and three cents per mile for each passenger—to acquire and hold real estate, make all necessary contracts, to borrow money on the credit of the corporation, and in declaring dividends, no prohibition is imposed except such as is prescribed by the above rates. The charter is perpetual.

The company organized under the charter as amended and proceeded to have the line surveyed and located, and in the latter part of 1850, let 18 miles of the road. In 1851, were let the contracts for preparing the road for the superstructure to Paris and Lexington.

#### ROUTE OF THE ROAD.

Commencing at Covington, on the Ohio river, at the mouth of Licking river, opposite the central part of Cincinnati, the road pursues the valley of main Licking to Falmouth, 38 miles—thence up the South Fork of Licking 26 miles, to Cynthiana, and continuing up the same to Stone Creek, a tributary, and up that 13 miles to Paris; thence up Huston creek, another tributary, to the dividing ridge between the waters of the Licking and Kentucky, crossing the ridge, and down the waters of Elkhorn to Lexington, 19 miles—in all 96 miles.

The topography of the country on either side of the Licking for many miles, is of such character as to unerringly point to the valley of that river as the only practicable route for a railway from the Queen of the West to the interior rich lands of Kentucky.

The road occupies this valley, and while the hills constrain the track to conform to the meanders of the river, in a considerable degree, they contribute an insurmountable barrier to all competition. No short or other line can be laid in the same valley or vicinity so as to connect the same points. The line is so laid as to make easy curves, which for the most part exceed 2000 feet radius. At a considerable cost the grade has been reduced, so that the maximum ascent is only 20 feet to the mile at any point between Covington and Paris—and only 30 feet between Paris and Lexington, which will not only insure good speed, but enable the Co. to transport heavy trains at little cost.

The cost of the road will exceed the first estimates, arising from a determination of the direction to make it a superior first class road of the most durable character, and from the great increase in price of labor.

Fortunately, the company had purchased the iron rails and chairs, and a portion of the spikes, before the late advance in iron, thus saving a very considerable sum in the cost of the road.

The whole cost for the entire work put into complete order, with all necessary depots, buildings, turnouts, turning-tables, cattle-guards, fences, wood sheds, water-stations, etc., and a full complement of machinery and cars, will be \$3,156,228 89; the items of which are contained in the engineer's report.

Of the work yet to be done, the contractors take from 20 to 25 per cent in the stock of the company.

#### MEANS OF THE COMPANY.

Individual stock.....	\$850,150	
Less for unavailable subscriptions and losses.....	40,000	
		\$810,150 00
Stock of counties and cities.....		620,000 00
Cincinnati loan.....		100,000 00
Subscription with Kenton, Pendleton and Harrison counties are authorised to make, and every confidence is reposed in their voting the subscription, each.....	100,000	300,000 00
Bonds of the company issued for the purchase of iron....		400,000 00
Bonds issued to borrow money.....		235,000 00
Bonds to be issued to borrow money.....		465,000 00
		2,930,150 00
Leaving to be made up....		226,078 89
		\$3,156,228 89

This amount will have to be made up by temporary loans, unless the earnings of the road be found sufficient to finish up the work after it is brought into use. Only \$400,000 of these bonds are embraced in a mortgage upon the whole road—100,000 to Cincinnati, covering a part, it is anticipated will soon be removed.

The road will be put into use before expending the above named sum by some \$350,000 to \$400,000.

Should, however, these counties fail to subscribe (of which there is no reasonable grounds for fear,) then that amount will have to be raised by other means, most probably by loan. The company contemplate an application to the Legislature, to be made at the ensuing session, for authority to increase the amount that may be borrowed by the company, and to provide for all contingencies, as well as firmly to secure all their issues.

#### CONNECTIONS, BUSINESS OF THE ROAD, ETC.

This road is a trunk line, and main connection of the Northern, Eastern, and Western roads concentrating at Cincinnati, with the roads in the South and South West. By reference to the accompanying map gotten up under the supervision of the able editor of the Railroad Journal, H. V. Poor, Esq., and upon which the lines of this road have been accurately laid down, with its connections,

its relative importance may at once be seen. It is happy in the undisturbed possession of the Licking Valley, and feels securely enclosed from all intrusion, for nature in arranging the hills around about her, seemed to say no harm from other roads shall come nigh thee! Passing through this valley the road emerges into one of the fairest and most productive regions on this continent. The superabundance yielded by the unsurpassed, if not unequalled rich land, of the counties of Harrison, Bourbon, Scott, Fayette, Clarke, Montgomery, Jessamine, Boyle and Mercer, will find a market over this road, whether destined for Cincinnati, Covington and Newport, the cities of the Great Basin, now constituting the first produce market, direct from the farms, in the world, or down the Ohio and Mississippi rivers, or by railway to the eastern cities.

By the extension of the road to Danville and the Tennessee line through the agency of the Danville and Lexington company, the fertile region farther South, is likewise offered through the same channel, the enjoyment of the same markets.

The road to Danville from Lexington 35 miles, is under contract, and the work is progressing to a speedy completion.

The whole of the stock is secured. Thence to the Tennessee line 84 miles, the line is now being surveyed for location and letting.

Over a half million of stock has been taken, and the subscriptions are steadily increasing, with every prospect of an early realization of a sum sufficient to make up one million, which will secure an early completion of the road. At the Tennessee line the extension of the road to a connection with the Chattanooga road, and Alabama and Tennessee River road, via Sparta and McMinnville and Winchester is under the charge of a company of that state with sufficient means obtained, fostered by the liberal policy of Tennessee towards railroad enterprises within her borders, to accomplish the work within the shortest practicable period. Tennessee, it will be remembered, provides \$8,000 per mile toward the construction of railways in the State.

Thus, our road is put into direct connection with all the important Southern roads. A very important feature of this connection is, that the same gauge is adopted as those roads, hence an uninterrupted transit will be offered to travellers and shippers, an object so much desired yet so seldom attained. The travel and business destined for the South or South west have here presented lines of railway over this new track terminating at Memphis, Vicksburg and on the Mississippi—New Orleans and Mobile on the Gulf of Mexico; and Savannah, Charleston, Wilmington, and other points on the Atlantic. Also another important connection is formed with the line through East Tennessee into Virginia.

Some conception may be had of the business of the road, when it is remembered that the beef market of Cincinnati is mostly supplied from Kentucky, besides thousands of heads of cattle are sent through Covington and Cincinnati to the South and East. Great numbers of hogs and sheep are likewise sent to the same markets, which, with all the surplus of the country along and contiguous to the line must find a transit to market over it.

The following estimate is undoubtedly of low figure, which we adopt in preference to others furnished, so as to be certainly not subject to any charge of exaggeration.

The number of passengers who will be transported over the road immediately after its completion, are estimated by some who are very competent to do so, at from 100 to 150 per day each way, including way travel; we will, however, set the number down at 75 each way, at \$3 each. \$164,240	
60,000 hogs, at 60 cents.....	36,000
22,000 head cattle, at \$2.50.....	38,250
Miscellaneous down freight 30,000 tons, at \$3 per ton.....	90,000
Up freight 50,000 tons, at \$4 per ton.....	200,000
Mail.....	10,000

The business of one year.....\$538,000  
Deduct 40 per cent. for running expenses, 215,490

Profit to be divided.....\$322,510

Which is exceeding 10 per cent upon the cost.  
There are vast quantities of hemp and tobacco,



besides other products raised in the interior of Kentucky, which will find a market over this road, that is not at present sent to the Covington and Cincinnati markets. Then all the goods and manufactures, groceries, salt, iron, and for a time at least, all the stone and coal, used along and contiguous to the line, will necessarily be freighted up this road.

By this route the distances from Covington and Cincinnati to the following places, will be as follows:

	Miles.
To Lexington .....	96
" Danville .....	131
" McMinnville .....	285
" Savannah .....	812
" Charleston .....	828
" Mobile .....	871

By means of the Covington and Louisville road (the company for the construction of which is now organized, has a large amount of stock taken, and is zealously urging forward the enterprise with every prospect of success to an early completion,) the distance from Covington to Louisville will be about 100 miles. To Nashville 280 miles.

By the Cincinnati and St. Louis road—to St. Louis 335 miles.

By railroad to following places, distance will be	
To Indianapolis .....	110 miles.
" Columbus .....	120 "
" Cleveland .....	245 "
" Baltimore via Parkersburg .....	564 "
" Philadelphia .....	662 "
" New York .....	750 "

The distances to Philadelphia and New York via Wheeling are about the same.

With this number of railroads converging at Cincinnati and Covington, this heretofore prominent and prosperous point of commerce and manufactures is magnified into one of the first importance. This point is conceded to be the great centre of trade in the West, and with the aid of these roads completed and in progress, it is ever inevitably destined to continue to be.

Already routes East and North are completed, and in prosperous use—reaching to the Lakes and Eastern Atlantic, and routes westward in rapid progress of construction, but no connection with or avenue of trade is yet opened to the Southern Atlantic. This road now offers this most desirable consummation. This company holds the key, as it were, to the Kentucky, Tennessee and Southern trade with the great Western mart, and through it to the Eastern markets.

No other route will likely be soon selected and occupied by a road to the North, and, indeed, none can come in successful competition.

These considerations of simple facts we respectfully submit, indubitably exhibit this company's security as being of the most certain solvent character, and that the stock must yield a handsome return to the holder.

December, 1852. M. M. BENTON, President.

#### Indiana and Illinois Central Railroad.

A meeting was recently held at Indianapolis, of the friends of the proposed line, and a company organized under the general railroad law of Indiana. The following are the articles of association adopted by the meeting.

ARTICLE 1st. The name and style of the corporation shall be the "Indiana and Illinois Central railway company."

ART. 2d. The capital stock of the company shall be two millions of dollars, to consist of forty thousand shares of fifty dollars each.

ART. 3d. The eastern terminus of said road shall be at the city of Indianapolis, in the State of Indiana, thence as nearly in a western direction as may be found practicable and convenient, by way, or within half a mile of the towns of Danville, Rockville and Montezuma, in the State of Indiana, and Decatur in the State of Illinois, in a direction leading to the city of Springfield, in the said State of Illinois. But that said road shall not diverge from a straight line in order to secure conditional stock; and passing through the following counties in the State of Indiana, viz: Marion, Hendricks, Putnam, Parke and Vermillion.

ART. 4th. The length of said road in the State of Indiana, as near as may be, is estimated to be seventy-five miles; and the total length to the city of Springfield is estimated to be one hundred and eighty-six miles.

ART. 5. The number of directors to manage the affairs of said company shall be seven; and we hereby declare that the following are the names of the directors elected by us from our own number to constitute the first board of directors of said company, to wit:

E. W. H. Ellis and William Sheets, of the county of Marion; Henry G. Todd and Edmund Clarke, of the county of Hendricks; Higgins Lane, of the county of Putnam; E. M. Benson and A. L. Roache, of the county of Parke.

A meeting of the stockholders and directors is appointed to be held on the 15th of February next, at Indianapolis.

#### Commerce of the United States.

Below we give a summary of the imports and exports of the United States for 1852:

##### MONTHLY SUMMARY OF IMPORTATIONS FOR 1852.

	Free Goods.	Specie, etc.
January .....	\$1,041,466	\$104,736
February .....	1,110,949	110,293
March .....	1,843,938	525,421
April .....	1,496,449	327,400
May .....	789,046	380,584
June .....	1,062,947	429,747
July .....	915,154	150,067
August .....	1,075,388	56,907
September .....	834,343	66,789
October .....	215,143	62,690
November .....	891,382	80,769
December .....	829,147	112,815

Total .....	\$12,105,352	\$2,408,215
	Dutiable Goods.	Duties and Deposits.
January .....	\$8,584,311	\$2,126,586
February .....	7,024,952	1,747,468
March .....	9,302,034	2,237,931
April .....	8,410,448	2,077,291
May .....	6,096,996	1,464,107
June .....	7,626,181	1,915,577
July .....	11,438,117	2,876,319
August .....	13,711,421	3,434,835
September .....	11,095,827	2,691,034
October .....	7,775,614	1,921,878
November .....	7,167,851	1,692,034
December .....	8,421,669	2,357,649

Total .....

Of which the following are some of the principal articles:

Dry Goods .....	\$62,618,424
Cigars .....	1,917,118
Coffee .....	5,249,640
Hardware and cutlery .....	2,711,286
Flides .....	3,005,862
Lead .....	1,248,960
Liquors .....	1,92,3929
Molasses .....	955,880
Railroad Iron .....	3,580,883
Steel .....	1,083,554
Sugar .....	8,920,600
Tea .....	6,398,104
Tobacco .....	708,387
Tin .....	3,045,320
Watches .....	2,183,047
Wines .....	1,645,356

##### WAREHOUSED.

	Dutiable.	Duties.
January .....	1,281,594	355,690
February .....	1,003,383	230,793
March .....	916,519	241,399
April .....	732,422	203,418
May .....	453,109	124,659
June .....	640,722	170,106
July .....	423,919	110,901
August .....	466,962	128,293
September .....	623,263	164,312
October .....	594,426	169,531
November .....	596,068	167,445
December .....	935,257	242,223

Total .....

	WITHDRAWN.	Dutiable.	Duties.
January .....	1,584,652	472,591	
February .....	1,788,977	639,229	
March .....	1,605,849	491,949	
April .....	1,255,429	419,547	
May .....	1,380,871	477,824	
June .....	911,479	314,855	
July .....	1,095,800	363,452	
August .....	1,329,991	448,797	
September .....	1,254,358	462,774	
October .....	1,256,570	466,727	
November .....	1,047,972	358,09	
December .....	903,841	329,245	

Total .....

##### EXPORTS FROM NEW YORK FOR 1852.

	Dom. Mdse.	For Dut.
January .....	\$2,419,296	\$358,244
February .....	3,352,943	322,772
March .....	4,313,245	357,230
April .....	4,243,044	353,262
May .....	4,249,924	545,973
June .....	3,566,869	482,594
July .....	2,965,542	325,732
August .....	2,340,820	220,978
September .....	3,289,429	318,868
October .....	3,497,874	484,801
November .....	3,529,449	541,296
December .....	2,947,848	518,852

Total .....

	For Free.	Spec. & Bul.
January .....	\$26,833	\$2,868,958
February .....	98,932	3,551,543
March .....	100,557	111,944
April .....	67,710	200,266
May .....	106,818	1,834,898
June .....	125,500	3,326,355
July .....	20,759	2,971,499
August .....	46,464	2,935,888
September .....	123,184	2,122,495
October .....	82,866	2,462,301
November .....	27,634	809,818
December .....	54,805	1,180,305

Total .....

##### Cumberland Coal Companies.

A meeting of the several Coal Companies of the Cumberland region was held on the 5th inst. at Baltimore for the purpose of conferring with the President of the Baltimore and Ohio railroad as to the amount of accommodation required for the coal business.

The following companies were represented: Phoenix, New Creek, Llangollen, Swanton, Borden, Thomas Kerr, Withers, Parker, Lonaconing, Frostburg, Alleghany, Chesapeake, and Cumberland.

Mr. Swann stated, in a few pertinent remarks, that the railroad company having passed a resolution to expend, if necessary, the sum of \$2,500,000, for laying a second track, and providing cars and engines for the accommodation of the coal trade, it became necessary to ascertain how many tons per day each coal company would guarantee to transport if the railroad company should furnish the means.

Whereupon the following applications were handed in:

Companies.	Capital.	Amount.
Phoenix .....	\$2,100,000	500 tons.
New Creek .....	2,000,000	400 "
Llangollen .....	250,000	500 "
Swanton .....	500,000	100 "
Borden .....	200,000	400 "
Thomas Kerr .....		75 "
Withers .....	1,000,000	400 "
Parker .....	2,000,000	600 "
Lonaconing .....	100,000	300 "
Frostburg .....	500,000	400 "
Alleghany .....	100,000	350 "
Chesapeake .....	1,000,000	1,000 "
Cumberland .....	3,000,000	2,000 "

It thus appeared that the coal companies asked for a daily transportation of 7025 tons of coal by the railroad.

Each company are left to make their own nego-

tations with the railroad company as to the security they are to furnish for the use of cars &c.

## American Railroad Journal.

Saturday, January 15, 1853.

### Trade and Tonnage of the Canals.

From the Auditor's statement of the business of the canals, it appears that the aggregate tonnage which came to and went from the Hudson river the past year was 2,756,349 tons, against 2,452,486 the previous year, showing an increase in 1852 over '51 of 303,863 tons.

The aggregate tonnage of property clearing from tide water the past year is 521,527 against 475,335 last year, an increase of 46,192 tons over 1851.

The aggregate tonnage of property to tide water the past season was 2,234,822 tons against 1,977,151 the previous year, an increase of 257,671 tons.

The estimated value of property which came to and went from the Hudson river the past year is \$185,789,546, and of the previous year \$143,145,297, an increase in 1852 of \$42,644,249 over 1851.

The value of property going from the Hudson river in 1852 is estimated at \$118,896,444, against \$89,217,789 the previous year, showing an increase over 1851 of \$29,678,655.

The estimated value of property coming to the Hudson river the past season is \$66,893,102, against \$53,927,508 the previous year, thus exhibiting an increase of \$12,965,594 in 1852.

We are indebted for the foregoing summary of the trade and tonnage of the canals for 1852, to the Albany Evening Journal. The result is not only most gratifying in a commercial point of view, but is a striking illustration of the influence that western works of internal improvement are beginning to exert upon the trade of the country.

Upon the canals, both the tonnage and values are stated at the *minimum* figures. The value of the tonnage leaving and arriving at tide water, it will be seen, is greater than either the entire value of the imports or exports of the whole country.

It will be borne in mind too, that during the past year the canal tolls have been removed from merchandise transported upon railroads, and consequently the Central and Erie lines have enjoyed a very large freight business in active opposition to the canal. We have not yet received the returns of these roads, and cannot give at the present time the tonnage and value of their freights. Upon the Erie road the receipts for transportation of freight alone, are equal to \$2,000,000. We presume that the receipts upon the Central line must fully equal this sum, showing the aggregate tolls for freight upon those two great lines to exceed the tolls on the canals, by nearly \$1,000,000.

Estimating the value of tonnage received at, and sent from tide water by those two roads to be equal \$65,000,000, and we have the grand aggregate of \$250,000,000 as the value of merchandise which arrived at, and left the Hudson, for the west for 1852. In comparison with this immense movement, all other routes, even the Mississippi River, dwindled into comparative insignificance.

The great increase of tonnage is owing chiefly to the extensive reduction of tolls at the commencement of navigation, in view of the extraordinary efforts making by rival works to draw off the trade of the interior to other routes.

It is remarkable that the increase of the tonnage upon our leading routes of internal commerce have shewn but a slight increase, with the exception of

the Erie canal, and that the increase of our foreign commerce has been confined almost entirely to the port of New York, by virtue of the monopoly of this trade secured to her by this work. The tonnage of the canal and the population and commerce of that city have moved forward with equal pace.

The tendency of the trade of the west has been steadily to the great lakes, and through them to the Hudson by way of the Erie canal. No western produce passes *East* over the Pennsylvania improvements. This fact may be ascribed to the inconvenient character of this work for heavy transportation.

How far this route is to be affected by the Pennsylvania railroad, remains to be seen. Another year will also show the influence that the Baltimore and Ohio railroad will have in turning this trade into new channels.

The competition of the New York railroads is apparently not felt by the canals. There can be no doubt, however, that, but for this competition, the trade of the former would have been vastly larger than it is. It remains to be seen whether the Pennsylvania and Maryland lines are in the same manner to divide its business.

One of the strongest arguments in favor of the opinion, that the northern, or New York route, will continue to maintain its ascendancy, is, the fact that the most important depots of trade in the west with two or three exceptions, now springing into existence, are situated upon the great lakes. It may be questioned, also, whether New York is not the cheapest point of access from the cities of Cincinnati, Louisville, and St. Louis, the great marts of trade of the central portions of the Mississippi valley. As far as the domestic and foreign markets are concerned, New York has some decided advantages over any other Atlantic port.

But we do not propose to touch upon matters involving the question of superiority of routes. Our object is to show the magnitude of the interior commerce of the country. It will supply a lucrative traffic to all our works constructed for its accommodation. It must be divided to a certain extent among all our great cities. The monopoly of the greatest share of it carries with it commercial supremacy upon this continent, not to say throughout the world.

### Texas.

**San Antonio and Gulf Railroad.**—The Board of Directors of this road has at last agreed by a vote of fourteen to one, that the Gulf terminus shall finally be at Port Lavaca.

This much vexed question being finally settled, opens to merchants and speculators a fine field for investment. The fact that it will be the center of trade of Western Texas, including the rivers Caney Colorado, Navidad, Lavaca, Gaudaloupe, and San Antonio, all which enter into Matagorda Bay, and the coast reaching to Corpus Christi, added to the immense overland trade to Eagle Pass and El Paso, leading to the provinces of Chihuahua, Durango and New Mexico, will make it one of the largest mercantile cities in Western Texas.

### Dayton and Michigan Railroad.

We learn that eleven miles of this road, from Dayton north, are completed, and that the track is being laid at the rate of half a mile a day. It is expected that the work will be carried to Troy by the first day of the new year, when the cars will commence running to that point, under an arrangement with the Cincinnati, Hamilton and Dayton Company.

### Steubenville and Indiana Railroad.

The annual meeting of the stockholders of the Steubenville and Indiana railroad company, was held at the office of the company in Steubenville, on Monday the 3d inst.

A resolution having been adopted in accordance with a recent act of the Legislature of Ohio, the number of directors was increased from seven to thirteen members; after which, the annual election of directors was held, and resulted in the choice of the following persons: James Means, Js. Parks, Wm. McDonald, Jas. Trumbull, D. L. Collier, Jas. Collier, John Andrews, C. C. Beatty, and Wm. Kilgore, of Steubenville, Chauncy Dewey, Cadiz, Wm. K. Johnson, Coshocton, Wm. B. Arven, Newark, and Wm. Neil, Columbus.

The above contains all the members of the old board, with the addition of six new members—making an excellent board of active, enterprising business men. The indefatigable president, Mr. James Means, will be continued at the head of affairs of the company; and the policy heretofore pursued, of urging a rapid and durable construction of the work, will be faithfully adhered to under the present management.

The work of construction is in a fair state of progress, in the hands of efficient contractors. Within the present year, the Steubenville and Indiana railroad will furnish to the rich central portions of Ohio, their first direct eastern railroad outlet to the Ohio river.

### Hannibal and St. Joseph Railroad.

From the Bloomington, Macon county, Journal, we learn that the surveys on the route of this road are being pushed forward with great vigor. The eastern and western corps of engineers met at Bloomington on the 24th ult. The line runs with the southern boundary of the town.

The eastern division of engineers have surveyed since the 1st of September, lines amounting to about 150 miles, or two complete routes from Hannibal to St. Louis. The topography has embraced an extent of from two to four miles in width upon these lines, and includes the bearings and length of every river, creek, water course and hollow—the position of every house, fence, road and bridge, and the location in respect to the lines of government corners, at distances not exceeding three or four miles apart. The height of the ground has been taken at every hundred feet on all the lines, and at shorter distances where the ground required it; and test lines have been run to verify the accuracy of the levels. The results of these examinations are embodied in profiles and maps on a large scale. Grade lines have been laid down, and approximate estimates of the earth work and masonry made out.

### Massachusetts.

**Salem and Lowell Railroad.**—At a meeting of the stockholders of this corporation, held recently, Stephen C. Phillips and J. W. Peale, of Salem; Wm. Livingston, Sidney Spaulding and Josiah B. French, of Lowell; Charles F. Flint, of Reading, and Jacob Coggin, of Tewksbury, were chosen directors.

**Lowell and Lawrence Railroad.**—The following gentlemen have been re-elected directors of this company for the ensuing year, by nearly a unanimous vote: Wm. Livingston, Sidney Spaulding, Otis Allen, Frederick Parker, Horace Howard, Isaac Farrington, and Abner W. Buttrick. At the first meeting of the new board of directors, Wm. Livingston was re-elected President, J. A. Knowles



Treasurer, and Frederick Parker Clerk for the ensuing year.

#### New York.

**Albany and Saratoga Springs Railroad.**—The company formed some time since to construct a direct railway from Albany to Saratoga Springs have completed their preliminary arrangements and filed their articles of association. The directors are Peter Gansevoort, Thomas W. Olcott, Andrew White, H. H. Martin, J. B. Plumb, Ellis Baker, Chas. B. Lansing, G. C. Davidson, S. H. Ransom, J. F. Rathbone, and E. Wicks, of Albany; and Charles A. Stetson, of New York.

#### Marine Disasters.

The following is taken from the report of John C. Hoyt, agent for the underwriters on the southern coast of Florida:

Vessels ashore and in distress at Key West during the year, 22. Estimated value of vessels and cargoes, \$663,800. Amount of salvage and expenses, \$162,700.

The following is a condensed report, for eight years, of the number of vessels that have been ashore on the Florida Reefs, and those that have put into Key West in distress:

	No. of vessels.	Value of vessels & cargoes.	Salvage.	Salvage & expenses.
1845.....	29	\$725,000	\$92,654	\$169,064
1846.....	26	731,000	69,600	105,700
1847.....	37	1,624,000	109,000	213,500
1848.....	41	1,282,000	125,800	200,060
1849.....	46	1,305,000	127,810	219,160
1850.....	30	922,000	122,831	200,000
1851.....	34	941,500	75,852	135,000
1852.....	22	663,800	80,112	162,100
Total...	265	\$8,194,400	\$803,699	\$1,434,584

#### Saratoga and Sackett's Harbor Railroad.

The Saratoga Republican understands that an arrangement is about to be made by which a number of individuals are to build this road, and stock it ready for running, filling and owning the balance of the stock themselves, and taking from the directors and collecting whatever stock is subscribed, and the company's right to the 250,000 acres of land from the State.

#### City of Chicago.

The total value of real and personal property in the city and county of Chicago, is \$12,085,045.—The valuation of the real estate in 1852, was \$9,693,642, in 1851, \$7,309,661, increase \$2,283,981. The total revenue is \$154,369.49.

#### Tennessee.

**Nashville and Chattanooga Railroad.**—At the annual meeting at Murfreesboro, on Dec. 29th last, of the Nashville and Chattanooga railroad company, the following named gentlemen were elected officers of the company for the present year:

V. K. Stevenson, President; Alexander Allison, John M. Bass, Jeremiah Cleveland, Peter S. Decherd, Francis B. Fogg, Lewis Garner, Samuel D. Morgan, John T. Neil, Andrew Ewing, Joseph B. Knowles, Arthur M. Rutledge, William Spence, Thos. Power, Jas. A. Whiteside, directors; Wm. A. Gleaves, Secretary and Treasurer.

#### Pennsylvania.

**Pennsylvania Railroad.**—Preparations for the erection of the depot of this company on Market street, Philadelphia, have been commenced. We learn from the Philadelphia North American that: The new depot will be very creditable in its architectural appearance, and of a capacity and extent exceeding any in the United States. It will cover a space of about 300 feet square, including the entire ground bounded by Market street on the north, Kelly street on the south, Juniper street on the west, and Thirteenth street on the east. This will sweep

away the High School, the State Arsenal, etc.—Such an edifice as this will be suitable for a work like the Pennsylvania railroad, besides being an ornament to the great thoroughfare on which it will front.

#### Stock and Money Market.

The stock market has been somewhat active during the past week, though at reduced figures for most of the fancies. All the sound stock are in demand at increasing rates. There has been a rapid advance in the stocks of the line from Albany to Buffalo, under the rumor that all are to be consolidated into one company. The securities of the leading Western roads are in active demand, and the supply of these is by no means large. There continues to be an active inquiry for such both for the domestic and foreign market.

The Philadelphia and Reading railroad company have declared a semi-annual dividend of 4 per cent. on the common stock and 3½ per cent. on the preferred stock; also a dividend of 8 per cent. on the common and 2 per cent. on the preferred stock. The gross receipts of the company for the fiscal year ending the 30th of November, have been \$2,480,626 41, an increase of \$166,296 01 over 1851. The annexed comparative table will show the sources of revenue in 1851 and 1852:

	1851.	1852.	Increase.
Travel..	\$152,431 64	\$168,430 20	\$15,998 65
Merchandise...	123,672 34	138,963 61	15,291 27
Coal....	2,018,870 79	2,150,677 17	131,806 38
From other sources..	19,455 63	22,455 34	3,199 71
Total...	\$2,314,330 40	\$2,480,626 41	\$166,296 01

#### Railway Share & Stock List;

CORRECTED WEEKLY FOR THE  
AMERICAN RAILROAD JOURNAL.

NEW YORK, JANUARY 15, 1853.

#### GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853.....	100½
U. S. 6's, 1856.....	108½
U. S. 6's, 1862.....	114½
U. S. 6's, 1862-coupon.....	120
U. S. 6's, 1867.....	119½
U. S. 6's, 1868.....	119½
U. S. 6's, 1868-coupon.....	120
Indiana 5's.....	102
Indiana 2½.....	59
" Canal loan 6's.....	97
" Canal preferred 5's.....	41
Alabama 5's.....	98
Illinois 6's, 1847.....	86
Illinois 6's-interest.....	59
Kentucky 6's, 1871.....	112
Maryland 6's.....	109
New York 6's, 1854-5.....	108
New York 6's, 1860-61-62.....	115½
New York 6's, 1864-65.....	119½
New York 6's, 1 y., 1866.....	119½
New York 5½'s, 1860-61.....	111
New York 5½'s, 1865.....	112
New York 5's, 1854-55.....	108
New York 5's, 1858-60-62.....	111
New York 5's, 1866.....	114
New York 4½'s, 1858-59-64.....	101
Canal certificates, 6's, 1861.....	—
Ohio 6's, 1856.....	104½
Ohio 6's, 1860.....	110
Ohio 6's, 1870.....	114
Ohio 6's, 1875.....	116
Ohio 5's, 1865.....	106
Ohio 7's, 1851.....	105½
Pennsylvania 5's.....	97
Pennsylvania 6's, 1847-53.....	101
Pennsylvania 6's, 1879.....	99½
Tennessee 5's.....	94
Tennessee 6's, 1860.....	108
Virginia 6's, 1886.....	110

#### CITY SECURITIES—BONDS.

Brooklyn 6's.....	106
Albany 6's, 1871-1881.....	107½
Cincinnati 6's.....	103
St. Louis.....	99½
Louisville 6's 1880.....	98½
Pittsburg 6's, 1869-1871.....	103½
New York 7's, 1857.....	108
New York 5's, 1858-60.....	103
New York 5's, 1870-75.....	104
New York 5's, 1890.....	105
Fire loan 5's, 1886.....	—
Philadelphia 6's, 1876-90.....	109
Baltimore 1870-90.....	107
Boston 5's.....	102

#### RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867.....	117
Erie 2d mortgage, 7's, 1859.....	110
Erie income 7's, 1855.....	103
Erie convertible bonds, 7's, 1871.....	103
Hudson River 1st mort., 7's, 1869.....	109½
Hudson River 2d mort., 7's, 1860.....	101½
New York and New Haven 7's, 1861.....	105
Reading 6's, 1870.....	91½
Reading mortgage, 6's, 1860.....	96½
Michigan Central, convertible, 8's, 1860.....	110½
Michigan Southern, 7's, 1860.....	101½
Cleveland, Col. and Cin. 7's, 1859.....	123
Cleveland and Pittsburg 7's, 1860.....	102
Ohio and Pennsylvania 7's, 1865.....	108
Ohio Central 7's, 1861.....	98

#### RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Jan. 6.	Jan. 13.
Albany and Schenectady.....	113	119
Boston and Maine.....	106	105½
Boston and Lowell.....	107	106
Boston and Worcester.....	105	103½
Boston and Providence.....	91½	91½
Baltimore and Ohio.....	95½	98
Baltimore and Susquehanna.....	34	34
Cleveland and Columbus.....	129	130
Columbus and Xenia.....	—	—
Camden and Amboy.....	150	—
Delaware and Hudson (canal).....	130	130
Eastern.....	100	96½
Erie.....	93½	92½
Fall River.....	—	—
Fitchburgh.....	103½	103
Georgia.....	—	—
Georgia Central.....	—	—
Harlem.....	72	72½
" preferred.....	115	115
Hartford and New Haven.....	129	129
Housatonic (preferred).....	35	35
Hudson River.....	75½	76½
Little Miami.....	120	120
Long Island.....	31½	31
Mad River.....	99	99
Madison and Indianapolis.....	111	111
Michigan Central.....	103½	106½
Michigan Southern.....	125	124
New York and New Haven.....	117	117
New Jersey.....	132	132
Nashua and Lowell.....	—	—
New Bedford and Taunton.....	117	117
Norwich and Worcester.....	53½	54½
Ogdensburg.....	30½	30½
Pennsylvania.....	49½	49½
Philadelphia, Wilm'gton & Balt. 37½	37½	38½
Petersburg.....	—	—
Richmond and Fredericksburg.....	105	105
Richmond and Petersburg.....	35	35
Reading.....	88	87
Rochester and Syracuse.....	125	135
Stonington.....	57½	57
South Carolina.....	122½	122½
Syracuse and Utica.....	133½	132
Taunton Branch.....	115	115
Utica and Schenectady.....	145	155
Vermont Central.....	18½	19½
Vermont and Massachusetts.....	20	22½
Virginia Central.....	40	40
Western.....	102	100½
Wilmington and Raleigh.....	57½	57½

#### Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad lanterns in another page

**Railroads in Texas.**

The state of Texas has been too recently settled to allow time for the construction of extensive lines of railroad. It must, however, soon become an active theatre for the progress of these works, which are not only very much needed, but for which the topographical features of the state are favorable. The surface of the greater part of it consists of level, open prairies, which can be prepared for the superstructure of railroads at a slight expense. The soil is of great fertility, capable of producing large quantities of sugar and cotton, which must ultimately be forwarded over railroads to market from the absence of navigable rivers.

The most prominent projects at the present time, occupying the attention of the people of this state, are the proposed road from Galveston to Red River, and the extension westward of the *New Orleans and Opelousas railroad*. The line of the former of these extends from Galveston in a generally northern direction, between the Brazos and Trinity rivers, to the Red river, which forms the northern boundary of the state. It will be about four hundred miles long. Through its whole length it traverses a fertile region, well adapted to the culture of cotton. This part of Texas is entirely wanting in any natural outlet for its products. It already contains a large and thriving population, capable of supplying a lucrative traffic to a road. Towards this project the state has made a grant of land equal to 5,000 acres per mile of road, and will, if necessary, extend farther aid. These lands are a gratuity to the company constructing the road. Measures are now in progress which will probably result in placing the whole of this important work under contract. When completed it will prove of great benefit to the people upon its route, and to northern Texas; will add a large area to the available cotton-producing district of the South, and will greatly increase the commercial importance of Galveston, the principal seaport of the state.

The other work referred to traverses the state from east to west, connecting at its eastern terminus with the *New Orleans and Opelousas road*. The above is proposed, not only as the outlet for the trade and commerce of the central portion of the state, but as part of a great line of railroad connecting the Gulf of Mexico with the Pacific. It is claimed that through Texas is to be found the appropriate line for such a work. Should such prove to be the fact, the proposed line will coincide with the route of the *national road*, as far as the territory of Texas is concerned. Apart, however, from all considerations of its becoming a portion of the Pacific project, the necessity for a railroad traversing the state from east to west is so urgent, that its speedy construction may be considered certain.

No state in the Union is making more rapid progress than Texas, and the lapse of time will surely bring with it all the improvements we find in older states. The value of such works is fully appreciated, and there is every disposition to encourage their construction by liberal grants of land, of which the state holds vast bodies. The only remaining work in progress in the state is the *Buffalo Bayou, Brazos and Colorado road*, extending from Harrisburg, on Buffalo bayou, to the Brazos river, a distance of thirty-two miles. The object of this road is to divert the trade of that river to Galveston bay. This trade has already become important, and the above work will open for it an outlet in a convenient direction to the principal seaport of the state.

There are numerous other projects engaging the

attention of the people in various portions of the state; but there are none, except those described, of which the direction and objects are sufficiently defined, to fall within the scope of this notice. When the great area of Texas, the favorable character of its territory for the construction of railroads, its resources, and the dense population it will soon contain, are taken into consideration, there can be no doubt that it will, ere long, become an active theatre of railroad enterprise and success.

In addition to those named, the following projects are attracting more or less attention throughout the state, viz:

1. The *Texas Western* railroad, to run from Corpus Christi to such points on the Rio Grande as may be deemed expedient, in the direction of El Paso.
2. The *Goliad and Arkansas Bay* railroad
3. The *Lavaca* railroad, to run up Guadalupe valley.
4. The *San Antonio and Mexican Gulf* railroad, to run from some point on the coast between Galveston and Corpus Christi to San Antonio.
5. The *Brazos and Colorado* railroad, from Austin to Galveston bay.
6. The *Henderson and Burkvile* road, from Burkvile to Henderson.
7. The *Vicksburg and Austin city* road.
8. The *Vicksburg and El Paso* road, in about 22° latitude.

**Natural vs. Artificial Routes of Commerce.**

In examining the character and prospective business of roads running at right angles to the parallels of latitude, compared with those following the same parallels, some marked points of difference are found. In the latter case, where there is no variety of pursuits, and where the whole population is engaged in agriculture, there can be little or no local traffic. The products being identical, all the surplus is the same in kind. But upon a route following a meridian of longitude, an entirely different rule prevails. Such routes traverse regions abounding in a diversity of productions, all of which are regarded as essential to the wants of every individual in the community. Such lines may be said to coincide with the *natural routes* of commerce, over which a large traffic must always pass, although the territory traversed may be entirely devoted to agriculture. The grains, provisions and animals of the north are wanted by the southern States engaged in the culture of cotton, rice, sugar and tobacco; and these last-named products are received by the people of the north in exchange for what they have to sell. In this country, therefore, the routes running east and west may be termed the *artificial*, those running north and south the *natural routes* of commerce. It is this fact that gives particular importance to the great line of communication which it is proposed to extend from the Gulf of Mexico to the lakes, thus uniting a country the extremes of which abound in the fruits of the tropics, and in the products of high northern latitudes.

A railroad extending from the Gulf of Mexico constitutes a great national route of commerce, and furnishes a channel of distribution over the whole country, for the vast variety of products of the regions traversed; and at the same time constitutes an outlet for such surplus as may not be required for domestic consumption. Such are the extent and range of human wants, that they require the whole aggregate production of every variety of soil and climate for their supply. Owing to the varie-

ty of climate, this country is capable of producing nearly every article used in ordinary consumption, and an abundance of all that are of primary importance. Upon the completion of a railroad from the Gulf of Mexico to Lake Michigan, a person living midway between the two will be enabled to have his table daily supplied with the luxuries of both extremes—the delicious fruits of the tropics, and the more tempered but equally valuable products of northern latitudes. The differences of climate will then practically cease to exist. The speed of the railway train will scatter over the whole country, freshly plucked, the fruits of every latitude, and one climate will practically exist for all, in the possession of an abundance of the products of each.

Extended lines of railroads are equally important in another point of view. It always happens that while in the aggregate there is an abundance of production for the wants of all, there will be failures of crops in different portions of the country. Such must be the case in a country of so vast an area as our own. With ordinary roads only, it is found impossible so to distribute the surplus produced as to secure abundance at points where production has failed. The limit to economical transportation over the ordinary roads is measured by a few miles. The greatest extremes of want and abundance, therefore, may exist in adjoining States. All these evils are remediable by railroads, so that they will not only secure to us a practical uniformity of climate, but of seasons also, giving to us the greatest variety, and at the same time the greatest certainty of uniform supply.

**Boston and Lowell Railroad.****ANNUAL MEETING OF THE STOCKHOLDERS.**

The annual meeting of the stockholders of this road took place at Boston on the 6th inst.

The annual report presented to the meeting states that the gross receipts of the year ending Nov. 30, 1852 was \$388,108 37. Of this sum \$230,938 42, or 59½ per cent. was from freight; and \$157,169 95, or 40½ per cent. from passengers. The expenses for the same time was \$255,293 33, to which must be added the balance of interest account (\$1,934 00), and there remains as the net profits for the year \$130,881 04; or 7 15-100 per cent upon the capital of \$1,830,000 00.

\$254,891 70 or 65½ per cent. of the gross income, has been derived from the business of the Lowell road; and \$133,216 67, or 34½ per cent. of that income, from business done in connection with other railroad companies.

Of the income from the Lowell road business, \$127,659 05, or 50 per cent., has been from passengers; and \$127,232 65, or 50 per cent., has been from merchandize; while of the income from business in connection with other roads \$29,510 90, or 22 15-100 per cent., have been from passengers, and \$103,705 77, or 77 85-100 per cent., have been from merchandize.

The gross receipts have been less than those of the previous year, by the sum of \$21,044 51; of which decrease \$11,000 94, is from the Lowell road proper, (viz: \$9,573 20 from passengers and \$1,521 68 from merchandize); and \$9,944 63 from the connecting roads, viz: \$7,497 72 from passengers, and \$2,451 91 from freight. The reduction is attributed to the diversion of business from the road at Manchester and Lowell. In reference to the diversion at Lowell the report states that "by an act passed at the last session of the Legislature, all restrictions against the connection of the Salem and



Lowell and the Boston and Maine roads, at Wilmington, were conditionally removed; and passengers and freight have been carried by that route between the cities of Boston and Lowell, without change of cars, since the first of July last. A suit has been commenced against the three companies, whose roads constitute this new line, for this infringement of the rights secured by the charter of this corporation.

The expenses of the year are \$11,744 49 less than the previous year.

During the past year two large expenditures have been undertaken. A Machine Shop, the want of which has been seriously felt, has been established at East Cambridge, where all repairs of engines and cars will hereafter be made. Also a new passenger house at Lowell. A table of receipts since 1835 is appended to the report. In 1835 they were \$64,654 39. In 1848 they reached 461,339 35. The largest year of net profits was in 1847, (195, 147). The debt of the road is \$65,000, of which \$25,000 is payable on demand, and the remainder in 1856.

The number of passengers carried in the cars was 541,531. Number of tons of merchandise 246,330.

The old Board of Directors was unanimously re-elected as follows: Wm. Sturgis, Joseph Tilden, Geo. W. Lyman, Eben Chadwick, Isaac Hinckley.

#### Chicago and Rock Island Railroad.

The report of the chief engineer of this road, Wm. Jervis, Esq., dated 20th December, 1852, indicates the progress and the present condition of the work.

The following are the amounts estimated to contractors after deducting twenty per cent.

1st estimate, April first.....	\$58,400
2d " May first.....	25,600
3d " June first.....	33,600
4th " July first.....	116,000
5th " Aug. first.....	190,400
6th " Sept. first.....	107,200
7th " Oct. first.....	176,000
8th " Nov. first.....	222,400
9th " Dec. first.....	184,000
	\$1,113,600
Per centage retained.....	278,400

Total amount of work done.....\$1,392,000

The total quantity of rails delivered at Chicago, amounts to 10,507 tons of 2000 pounds,—sufficient to complete the track to Peru with the necessary side tracks at the stations. The track was laid to Joliet, 40 miles on the 9th of Oct. last. Trains have run regularly since the 18th October. Between Joliet and Peru the grading is completed with the exception of nine thousand feet in detached places, mostly light work, and the superstructure of twenty-five bridges, all small, with the exception of the one over the Peccumsagsan, one span of 100 feet, and the Vermillion two spans of one hundred feet each. The timber for nearly all the unfinished bridges is framed and on the ground.

The track was laid at the date of the report 11 miles beyond Joliet, and a detached line of 6 miles, leaving six miles which, when closed will make a connected line from Chicago of 63½ miles.

Between Peru and Rock Island, the grading has been commenced, and active operations are in progress. On the 1st December last, seven miles of grading had been finished. The bridge at Rock river was commenced early in the season, and the two abutments and four piers completed and the foundation for the fifth pier put in, leaving the

foundations for the sixth and seventh piers and masonry for three piers to be built next season.

Equipments have been delivered as follows:

3 Engines.	
4 Passenger cars.	
6 Freight " covered.	
24 " " open.	
12 Gravel " "	
5 Hand repairing cars.	

All the station buildings between Chicago and Joliet are in progress. The wharf on the south branch of Chicago river in front of the depot ground has been completed. An engine house sufficient to store ten engines is nearly ready for the roof.

The walls of the blacksmith shop are up and those of the machine shop and car shop have been commenced.

At Joliet, a passenger house, 35 by 50 has been built, and timber prepared for a freight house. The timber is also framed for all the intermediate station buildings between Joliet and Chicago.

Fencing has been done along the line between Chicago and Joliet, and a proposition has been made for the balance of fence through to Rock Island.

The following are the quantities of land taken in the several counties for the right of way and station grounds.

Cook County.....	25.23 miles.	293.80 acres.
Will ".....	24.71 " "	313.59 " "
Grundy ".....	20.21 " "	266.96 " "
La Salle ".....	31.51 " "	411.49 " "
Bureau ".....	40.61 " "	587.21 " "
Henry ".....	27.71 " "	335.86 " "
Rock Isl. ".....	10.90 " "	132.36 " "

180.88 2,341.37

Extra for station grounds..... 149.00

Total land.....2,490.37

It is anticipated that the road will be opened to Ottawa by the first of February, and to Peru by the 1st of March next.

#### Maryland.

The following items of general interest are taken from the message of Gov. Lowe of Maryland. The financial condition of the State is thus exhibited:

The whole amount in the Treasury, during the last fiscal year (exclusive of the sum of \$199,442 63, received for and credited to the use of the several funds,) was \$1,530,911; the expenditures were \$1,360,458 72, and the balance in the Treasury, at the close of the year, was \$170,452 28. During the same period \$30,000 of the matured public debt were paid; and \$343 688 42 were applied, in pursuance of the provisions of the General Appropriation Act of the last session, to the augmentation of the Sinking Fund. If, therefore, you take the last two sums from the account of expenditures, and add them to the balance in the Treasury above shown, you will find that the actual surplus revenues of the year amounted to the sum of \$543,540. 70, after disbursing the sum of \$677,456 30 in payment of the current interest on the public debt, and the further sum of \$309,914 for all other purposes.

The total debt of the State is set down at 15,260, 668 less the amount in the Sinking Fund which on 1st of Dec. last was \$2,728,075.

During the past fiscal year, the Washington Branch paid to the State, on account of dividends, the sum of \$44,000, being the same as that of the year previous; and it also paid, on account of capitation tax, \$59,826 69, showing an increase over the year previous of \$2,602 86: over the year 1850, of \$7,304 72; and over the year 1849, of \$7,806 92; which indicates the permanency of that source of the revenues of the State. How far it may be considered good policy to continue this tax, will hereafter become a question worthy of consideration.

The tolls collected from the first of January to the thirteenth of November, 1852, on the Chesapeake and Ohio Canal amount to \$78,486 55;

which, with the estimate for December, will swell the aggregate to about ninety thousand dollars. To this sum may be added three thousand dollars for water-rents; which will give the gross revenue for the year. The whole tonnage of all articles transported for various distances from January to December, was, ascending, 13,548 tons, descending 127,447 tons; which, with the estimate for December, will show an aggregate of 160,000 tons for the year.

The receipts for tolls on the Susquehanna and Tide Water Canal for the year past will not vary much from that of the year previous, when it amounted to \$164,446.

During the past fiscal year the Baltimore and Susquehanna road has paid the State \$60,000 and since its close \$25,000 more. During the past two years four hundred tons of new rails have been laid on this road. The Governor considers that the relations these works sustain to the financial resources of the State are decidedly favorable.

#### Finances of Illinois.

The financial condition of Illinois is contained in the Message of Gov. French of that State.

During the last years, the yearly increase in the amount of revenue received into the treasury has been very large, by far exceeding the expectations of those who have had their attention more immediately directed to this subject. That this increase will be much greater for the future may be most confidently expected. The mill and a half tax, which is exclusively appropriated to interest purposes, amounted in 1847 to \$138,309 64, while in 1851 it had increased to \$206,728. The two mill tax, imposed by the 15th article of the constitution, was, in 1849, \$210,865 50: in 1851 it amounted to \$275,627 35, showing an increase of revenue of near 30 per cent for the last two years. The year 1845, the taxable property, real and personal, as returned to the Auditor of State, amounted to \$82, 327,105. In 1849, it amounted to \$105,432,752. In 1851, it had increased to \$137,818,679 30, being an increase of the taxable property of the State, in two years, of \$32,000,000, or 30 per cent in the two years. Applications have been made to the Auditor for the establishment of 39 banks, with an assumed capital stock of \$8,460,000; 17 of this number have deposited securities to the nominal amt of \$1,649,100, while the remaining 22 have deposited no securities whatever.

The present condition of the State debt may be stated as follows:

Principal debt, funded under the act of 1847.....	\$5,771,959 74
Interest on same to date.....	1,886 926 71
Arreared interest funded.....	2,023,629 13
Unfunded internal improvement bonds and scrip.....	397,480 00
Interest on same.....	286,185 60
Wiggins' loan, principal and interest.....	172,000 00
Liquidation bonds.....	363,358 79
	1,209,024 39
	10,837,539 97

From which deduct—	
Amount new internal improvement stock, etc., purchased school fund..	55,358 87
Amount new internal improvement stock, principal and interest, taken up and cancelled.....	172,835 75
Amount paid on principal two mill tax.....	650,000 00
Amount paid on interest mill and a half tax.....	495,000 00
	1,373,184 62
	9,464,355 35

Principal canal debt....	4,886,522 83
Int. on same up to Jan. 4, 1853.....	2,373,299 23
	7,259,822 06

Aggregate debt.....\$16,724,177 41

The lands belonging to the State, exclusive of canal lands, and which now await the action of the Legislature, amount to 124,269 56-100 acres, which

bought to realise the State, under a judicious sale, not less than \$750,000.

#### Caloric Ship Ericsson.

On Tuesday last the harbor of New York was the scene on which was displayed the complete success of a grand application of natural powers to the purposes of navigation. Less than half a century ago the trial trip which marked the triumph of Fulton in thus applying steam was tried in these waters, and here the Savannah and the Sirius at subsequent periods attested the capacity of the same power to propel vessels across the ocean. We rejoice that this event has taken place here, and that Capt. Ericsson the inventor of the Caloric Engine has been enabled to add this mechanical agent to those already under the control of man, by the assistance of the merchants of New York.

At half past nine the vessel which was previously lying in the river opposite the northern line of the Battery was put in motion and proceeded down the bay. At 15 minutes past ten she was off Castle William and at 45 minutes past ten at the Narrows. After proceeding about 1½ miles below this point the Ericsson was put about and proceeded to her mooring ground in the river at about 12, having accomplished a distance of nearly 20 miles in about two hours and a half. The greatest number of revolutions made during the trip was ten and a quarter in a minute, and the greatest speed was at the rate of from 9 to 10 miles per hour. During the trip the steamship Baltic met the Ericsson and salutes were exchanged, while in the minds of all the parallel between the two engines—the one in its full perfection and the other but in infancy could not but be forcibly presented.

The Ericsson is a ship of 2,200 tons, and her hull is beautifully modeled. The machinery consists of what may be termed a pair of two single acting Caloric Engines, one in front and the other abaft of the wheel-shaft and connected with it by an arrangement of levers, connecting rods and pistons as in some forms of the steam engine. The connecting rods of both engines are united with the same crank, and form with each other an acute angle in such manner as that the weight of the pistons alternately in their descent shall be employed in assisting the other while passing the center. The working cylinders are four in number, fourteen feet in diameter and having a stroke of 6 feet. The pistons playing in these cylinders have a superficial extent of 22,300 inches. Beneath the working cylinders are the furnaces, the radiant heat from which plays upon the plate forming the bottoms of the cylinders. This plate is of iron and about an inch and a quarter thick. Capt. Ericsson deems that the oxidation will be but slow, and that the plate will last at least four years before they will require to be replaced, a longer time than the iron boilers of sea going steam vessels last. These plates can likewise be coated with fire brick or some similar material still further to diminish this expense. Above the working cylinders and connected with them by a series of tubes are the supply cylinders or force air pumps—the diameter of these is 11½ feet. The pistons of the supply cylinders are connected by means of rods so that they are moved by and through the same distance as the pistons in the working cylinder. By them the air from the atmosphere is injected when the engine is working into the larger cylinder, where its expansion raises the piston and produces the mechanical result required. The difference between the area of the pistons in the working and

supply cylinders measures, as the distance they travel is equal, the expansion of the air due to the effect of the heat.

On the under side of the pistons in the supply cylinders are valves opening upwards, through these the air passes during the descent of the pistons, as they rise the air is forced into chambers or reservoirs over the supply cylinders. These reservoirs communicate with the working cylinders near their base by connecting pipes. Within the connecting pipe of each of the four engines is an apparatus formed of iron wire 1-16 of an inch in diameter woven into a web six feet long and four wide. The meshes or openings in this wire net are equal to the superficial space occupied by the wires themselves. Fifty such thicknesses of wire cloth are placed in each of the connecting pipes and through them the heated air of the working cylinder passes before it escapes into the atmosphere. The rapidly cooling properties of wire gauge were taken advantage of by Sir Humphrey Davy in the construction of the Safety Lamp and an analogous employment in the Caloric Engine by Ericsson is perhaps that which ensures its economical working by preventing the escape of the air until it has rendered up nearly all the heat with which it is charged to these folds of metallic wire. This apparatus is called the regenerator. The cold air from the supply cylinder and reservoir also passes through the regenerator and takes up in turn the heat from the surface of the wires that has been absorbed by them from the previous charge of the working cylinder. The pressure which the air is intended to exert in the working cylinders of the engines of the Ericsson is 13 pounds. To obtain this force it is found necessary to heat the air to 384° of Fahrenheit, at which temperature it stands in the working cylinder. After passing through the wires of the regenerator the escape air issuing from the valves of the connecting pipe is only 30° warmer than the surrounding atmosphere.

The engine is started by pumping air by hand into the working cylinders where it expands until the pistons have reached their topmost limit, then having acquired a considerable amount of heat on the descent of the piston it passes through the regenerators where the heat is deposited to be rendered up to the supply of air contained in the reservoir. As soon as the first cylinder full has escaped, the air on the opening of a suitable valve rushes down the connecting pipe and through the regenerator taking up the heat there stored and expanding with the additional heat derived from the plate at the bottom of the working cylinder so as to fill the cylinder to its utmost capacity, driving the piston before it and forcing the piston of the supply cylinder along while condensing in the reservoir the air which is next to be used.

Capt. Ericsson was on board during the trip and explained to the company who consisted for the most part of scientific gentlemen and those connected with the press, the various parts of his remarkable invention.

The supply of coal sufficient to work the four cylinders during 24 hours, was stated to be from 5 to 6 tons. The species of coal used is anthracite and the radiant heat from the incandescent fuel is thrown direct on the bed plate of the working cylinder—which is heated up to a low brown heat.—The piston of the working cylinder is a hollow chamber of iron shaped like a plano-convex lens, the plane surface being uppermost and the intervening space is filled in with charcoal and plaster of Paris to prevent as far as possible the conduction

of heat to the upper surface. The packing is at the top of the piston and being defended from the heat by the interposition of a slowly conducting stratum as well as being at its lowest point about six feet from the bottom of the cylinder, is in no danger of burning. The packing of the working piston is lubricated directly and the workman who performs this task stands on the top of the piston while supplying oil or tallow to the rubbing surfaces. On this piston many of the visitors gathered and were enabled to take a ride in this novel way.

The quantity of air used by the engines working at their full speed of 13 revolutions of the paddle-wheel is about 75 tons in an hour, and this draft of air can be so arranged as to effect the thorough ventilation of the ship, no unimportant consideration.

Capt. Ericsson has had many difficulties to encounter in putting his plan into successful operation, but that has now been accomplished. The casting and boring of cylinders of such large dimensions as to fit engines for the propulsion of large vessels is one of the most obvious. Indeed the builders of the present machinery, Messrs. Hogg & Delamater, declined to undertake the task of casting cylinders of more than 14 feet in diameter, they are now willing at their own risk to contract for the execution of cylinders 16 or even 20 feet in diameter. Another difficulty consists in preventing leakage at the valves and the rivets in the connecting pipe and its junctions, and this reduced the pressure during the trip to eight pounds instead of 12 pounds, that for which the various parts of the engine are arranged.

The results of this trip are, we think, a demonstrated success, the question of economy is that which must ultimately prevail in all mechanical questions, and here, we believe, the advantage is obviously in favor of the Caloric over the steam engine. An element still more important, though less regarded, that of safety, is likewise secured by the Ericsson engine. In fact we can hardly conceive of any serious accident endangering life resulting from their use, except those necessarily connected with the motion of ponderous machinery. Nothing like the destruction produced by the explosion of a boiler can happen, and all must exult at the success of an invention which thus tends to the preservation of human life.

The name of Ericsson will be handed down among those of the great inventors whose genius has pushed forward the bounds of human art. His invention is an era in mechanics, only comparable to that of the illustrious Watt. We do not bound its applications to its present brilliant success in navigation. The Ericsson engines must entirely supersede the steam engine in work shops and manufactories, and we doubt not if it would not be proper in view of their safety to prohibit the use of steam engines within the limits of a city. Ericsson has chained the *whirlwind* the myth of Ulysses and the imprisoned winds has been realized in the cylinders of the new ship which the other day crossed over the waters of the bay of New York. While thus according the palm of mechanical genius to Ericsson, we must not forget the liberal encouragement he has met with from those who have advanced means to him to make this costly experiment.—Mr. John B. Kitching, a merchant of this city, and Mr. Edwin B. Stoughton, a lawyer, have been the most prominent of those who have aided the inventor with money and advice. Mr. Hutchinson, also a merchant, has given material aid. They have



their reward in being associated with one of the finest discoveries of the age.

#### Schuylkill Navigation Company's Report.

The Schuylkill Navigation company has made public its regular annual report. The coal tonnage for the year is 800,423 tons, the revenues on which averaged 52 cents per ton, giving an aggregate of \$416,954. The miscellaneous tonnage ascending and descending amounted to 274,661 tons, yielding a revenue of \$66,840 80, making with the income from water rents and real estate, a total revenue for the year of \$511,527 81. The charges against this income have been for current expenses, salaries, etc. \$184,313 51 and for interest on loans \$99,417 36, making a total of expenditures of \$383,730 87, leaving a balance of \$127,796 94. Of this balance, \$44,322 03 have been appropriated for the construction of additional landings, and \$36,550 79 appropriated to complete the payment of the debt contracted for the repairs of the canal after the floods of 1850.

The total liabilities of the company are.....\$10,397,496 12

The increased tonnage over the greatest tonnage in any previous year, is 215,346 tons. The offer of a series of moderate premiums to the boatmen for dispatch, and the general prosperity and activity of the coal trade, have doubtless contributed to this gratifying result. The number of trips made by each boat has been largely increased, and in some cases more than doubled. The circular trip between Pottsville and New York and back has been made in less than eight days, and that between Pottsville and Philadelphia in less than five days. For the accommodation of any increase in the coal tonnage of 1853, contracts have been made for an additional number of cars and boats. The proposed increase of cars and boats is equal to about 900,000 tons of coal, and from the present indications of the trade, that quantity may be fairly estimated as to be carried. There has been a remarkable exemption from even ordinary accidents and detentions in 1852. It has not been deemed necessary to limit the draught of water for the boats below five feet four inches, except for a few days.—For more than half of the season, five feet 6 inches have been the usual draughts of the boats. The dams and mechanical structures generally are in good condition and tight. The navigation was opened on the 6th of March, 1852, in the midst of ice, which was speedily removed by drawing down and refilling the levels, and thus causing strong currents of water to be passed through them. Under this process, ice of from 10 to 12 inches in thickness disappeared within forty eight hours. The line was closed, for the purpose of making the ordinary repairs on the first of January, 1853, giving the largest business season on record.

#### Missouri.

**Iron Mountain Railroad.**—A meeting was held on the 20th ult., at Hillsboro', Jefferson Co., Mo., for the purpose of advancing the construction of a road direct between St. Louis and the Iron Mountain. The report, which was passed by the meeting, concluded by asserting that the road on the direct route will be between twenty and thirty miles shorter than that of the branch which is to connect with the Pacific railroad; that it will be over a surface incomparably superior for the construction of a railroad, and necessarily at a less cost. The position is proven by the estimates for the first 20 miles of the Pacific railroad, and the like number from St. Louis on Capt. Barney's survey south on the west bank of the Mississippi—the latter to cost less by \$150,000 for the first 20 miles. Resolutions were passed, requesting the Legislature to vote for a loan of the credit of the State to build such a road, and that the County Court of Jefferson Co. be requested to subscribe on behalf of the county to the stock of an independent railroad, from St. Louis to the Iron Mountain, the sum of \$50,000, provided the road runs through the county on the most direct and practicable route.

#### Supplemental Act to the General Railroad Law of Indiana.

The following is an act supplemental to the general railroad law of Indiana which we published last week. It was passed June 18, 1852.

**SECTION 1.** *Be it enacted by the General Assembly of the State of Indiana,* That nothing in said act shall be construed to grant the power to any railroad company that may be organized under the provisions of this act, to cross or intersect any railroad now in course of construction, within forty miles of its terminus, where such terminus is within the corporate limits of a city in this State, situate on a navigable stream, within two miles of the boundary lines of two adjoining states, except within the corporate limits of such city.

**Sec 2.** The provisions of this act shall not be so construed as to affect in any manner, whatever, the construction of any railroad by any company at any time heretofore incorporated under any act of incorporation passed by the general Assembly of the State of Indiana, upon the route designated in the act of incorporation, or in anywise to impair the rights of such company, or to prevent or hinder the construction of any railroad having both of the terminations thereof within the limits of this state, and not forming a regular connection with a railroad leading directly to some city situate upon the Ohio river beyond the limits of the State.

#### Kentucky.

**Maysville and Big Sandy Railroad.**—Mr. Childs, Chief Engineer of the Maysville and Big Sandy railroad, has organized a party to locate the line of the road between Maysville and Springville, opposite Portsmouth. He is now at Springville, at which point the work of location will commence and proceed down to Maysville. The company will be prepared to put the graduation and masonry under contract as soon as the locating party shall have prepared the line.

**Maysville and Lexington Railroad.**—This company are still vigorously prosecuting the graduation and masonry of their line, having a heavy force of workmen employed. They have been fortunate in the sale of all the county and corporate bonds, as we are assured by the President, Mr. Waller, who has just returned from New York, as first rate prices, and are now in possession of ample cash funds to push forward their work with increased and unusual vigor. They have purchased all their rails, chairs, spikes and machinery, at prices considerably below the present market rates; and have contracted for laying the entire track or superstructure between Maysville and Lexington. That portion of the road lying between Paris and Lexington will be completed and in running order, with all the necessary engines and cars in July next; between Paris and Millersburg, and between Maysville and Johnson, in September next; and the remaining gap between Johnson and Millersburg early in the spring of 1854. Mr. Waller, during his late trip East, purchased three more Locomotives, making five in all, and secured them at the cost of engines before the late rise in iron.—*Maysville Eagle.*

#### Easton and Water Gap Railroad.

At a meeting of the stockholders of the Philadelphia, Easton and Delaware Water Gap railroad company, held recently in Philadelphia, the following gentlemen were elected as officers for the ensuing year:

**President**—Thos. S. Fernon.—**Directors**.—Isaac S. Waterman, John Welsh, Jr., Chas. W. Churchman, J. Gillingham Fell, John Jordan, Jr., Isaac R. Davis, Jacob M. Thomas, C. Henry Fisher, Jas. Traquair, John O. James, John Ely.

These, says the Commercial Register, are of our ablest and best citizens, and show that the road is in excellent hands. A second corps of engineers will be put on to-day, and the heavy work of the line will be begun early in the spring. We hail this movement as one calculated to benefit Philadelphia, and have confidence in its early completion.

#### Ohio Railroads.

We learn that the railroads radiating from Cincinnati have not sustained so much damage as was anticipated from the recent floods. Mr. L'Homme-dieu, the president of the Cincinnati and Dayton, states that the injury to the road is far less than he had any reason to suppose, and it can all be repaired for less than five thousand dollars. The company have now been able to ascertain the points on the road most exposed to danger from high water, and to successfully protect them in future. There are several points which will require strengthening by slope walls; and when this is done, there will be no apprehension of any further interruptions in the business of the road, in consequence of sudden and extraordinary floods in the streams in its vicinity.

The only material damage sustained on the Dayton and Western road was the partial destruction of two bridges over Wolf Creek. These are nearly repaired, and in a day or two the trains will pass over the entire line. They are now running regularly to within two miles of the city, from which point passengers are brought in by omnibusses.

The Greenville road, from the Junction north, including the section between Greenville and Union escaped without any injury whatever.

The Mad River road, between Cincinnati and Springfield, has been repaired and is in running order.

#### Railroad to Lake Superior.

We learn from the Pittsburgh Gazette that an application is about to be made to Congress, urging a grant of land to aid in the construction of a proposed railroad to the Copper mines of Lake Superior, commencing at Pontiac, in Michigan, to which point there is now a railroad in operation from Detroit. The route from Pontiac is by way of Flint in Genesee county, to Marquette Bay, in the county of Mason; and from Manitowoc on the opposite shore of Lake Michigan, in Wisconsin, to Kewana Point on Lake Superior, with a branch to the Ontonagon, and a branch to Iron Bay, and near the mouth of Chocolate river. The distance is stated, in direct lines, as follows:

Detroit to Pontiac, now railroad.....	25 miles.
Pontiac to Marquette.....	186 "
Marquette across the Lake to Manitowoc	60 "
Manitowoc to Kewana Point.....	196 "

Branch to Iron Bay.....	467 miles.
Branch to Ontonagon.....	60 "

Total.....567 miles.

After leaving Flint, 31 miles from Pontiac, the route strikes the public lands, which continue the whole way to Marquette Bay, 155 miles. On the opposite side of the lake, from Manitowoc to Green Bay, 37 miles, there is not much Government land; but from the latter point to Lake Superior, all the land belongs to Government, except what has been taken up by miners.

#### Disasters on the Western Waters during the year 1852.

We learn from the Louisville Courier that there were destroyed on the Mississippi and its tributaries during the last year 78 steamboats, 4 barges, 73 coal boats, 32 salt boats, and 4 other flat boats. It appears that 48 boats were lost by being snagged, 16 by explosions, 41 were burnt, and the others lost by collision and other mishaps. The greater number of the flat boats were destroyed by the breaking up of the ice last winter, and the number of lives lost is upwards of four hundred.

## Pennsylvania.

The following extracts on the finances and statistics of Pennsylvania, are taken from the message of Gov. Bigler, of that state:

The receipts of the Treasury during the late fiscal year, exclusive of the proceeds of loans, amounted to the gross sum of \$4,561,885 50, which amount added to the balance in the Treasury on the first of December, 1851, (leaving out the unavailable means which only serve to confuse the account) makes the total ordinary means of the treasury for the year, \$5,104,424 71. The payments exclusive of the cancellation of state stock—the appropriations to the North Branch canal and the Portage railroad, amounted to the sum of \$4,129,262 49, being \$976,002 12 less than the receipts. Of this excess, however, the sum of \$304,024 96 was applied to the completion of the Western reservoir—to relaying the north track of the Columbia railroad, and to other extraordinary repairs on the public works, leaving an actual available balance in the treasury on the first day of December, '52, of \$671,037 72. But, it must be observed, in order to a correct comprehension of the relative condition of the treasury, that the unpaid balances of appropriations for '51, amount to \$621,338 95, whilst those of '52 only reach the sum of \$529,801 14, showing a difference in favor of the latter year of near \$100,000.

The receipts for the current year are estimated at \$4,626,500 and the expenditures at \$4,028,670.

The Governor recommends the passage of a law authorizing the cancelment of the old five per cent. bonds, and the creation of new ones free of taxation with coupons attached, bearing five per cent. interest, on which not less than 5½ per cent. of a cash premium is to be paid.

The receipts from the public works for the fiscal year of '52, as appears in the report of the Canal commissioners, amounted to the sum of \$1,896,811 42, and the ordinary expenditures for the same period, to the sum of \$1,029,341 23, leaving a net revenue to the state of \$867,470 19.

The message contains a summary of the amounts of production in the principal articles as shown by the census returns.

The population numbers 2,311,786, being an increase of almost 35 per cent. since 1840. According to this ratio of growth in 1870 it will number near 4,000,000. The debt of forty millions is, at this time, a charge on each inhabitant of a little over eighteen dollars; in 1870, according to this datum, it will but little exceed ten. The present assessed value of real and personal estate is \$497,039,649, showing an increase of eighteen per cent. since 1840, and according to this ratio of growth up to 1870, it will amount to the sum of \$675,973,922. The debt of forty millions was a lien of 8 per cent. on the assessable property of 1840; on that of 1870 it will be only five per cent. and eight mills. But in the census report of 1850, the true value of the property of the State is estimated at \$722,486,120; on this sum our present debt is but a fraction over 5½ per cent. Who can doubt the solvency of such a debtor?

The production of wheat, in 1840, was 13,213,077 bushels. In 1850, 15,482,191, being an increase of 17 per cent. at which rate the yield for 1870 will exceed twenty millions of bushels. The same rate of increase is apparent in rye, corn, oats, barley, buckwheat and live stock. The census of 1840 shows a production for that year of 98,395 tons of pig metal—that of 1850, is 285,702, or an increase of 190 per cent. At this rate the yield of 1870 would be 1,371,370 tons. Wrought iron in 1840 amounted to 87,244 tons—in 1850 it is 182,506 tons. On this datum the production of 1870 would be 590,369 tons. The woollen manufactures for 1840 were valued at 2,319,161 dollars, and for 1850 at \$5,321,866, showing a gain in ten years of 129 per cent., and the enormous yield by 1870 of \$13,738,404. In cotton goods the increase has been about 6 per cent., which ratio of growth up to 1870 would show a production of about six millions of dollars.

The whole amount of anthracite coal mined and taken to market in 1840 was 867,000 tons. In 1852 the product will reach near five millions of tons, being an increase in twelve years of 600 per cent. This rate of augmentation up to 1870 would give

the startling production of over forty-five millions of tons, and yielding, at the present Philadelphia prices, the sum of one hundred and eighty millions of dollars, being more than treble the present revenues of the whole United States.

To consummate this greatness the prosecution of the great works of the State is recommended—the North Branch Canal must be finished and the Alleghenies passed without the use of inclined planes. But prominent among these is considered the construction of a work to connect the metropolis of the State with the Lakes.

We need says Gov. Bigler the shortest and best line of communication between the Lakes and the Atlantic at Philadelphia. The considerations in favor of such an improvement are too numerous to be given in this document. The advantage which it would possess in distance—in light grades—in uniformity of gauge—when tested by the laws of trade, renders its superiority over any other avenue which now exists or that can hereafter be constructed between the Atlantic and the Lakes, a fixed fact. The harbor at Erie is regarded by competent engineers as the best on the Lakes, and from no other point can so short a line be made to the seaboard. Such a medium of communication would be of inestimable value to Erie, to the intermediate country, and to our State metropolis. Our citizens, by neglecting or deferring the construction of this work, may subject themselves to the charge of slighting the beneficence of nature in not co-operating with her great designs.

## Boston and New York, vs. Philadelphia and Pittsburgh.

The immense quantities of grain, flour and provisions of the west which seek a market at Boston and New York, as compared with Philadelphia, is the result simply of no other cause than the natural effect of the difference which exists in the commercial policy of those cities. For the sake of illustration, let us take the article of flour, and compare the rate of charges on the railroads leading to Boston, and to New York, with the rates by the Pennsylvania Central railroad, leading to Philadelphia.

From Ogdensburg to Boston the distance by railroad is 400 miles; transportation 50 cents per barrel. From Albany to Boston 200 miles, transportation 25 cents. From Dunkirk to New York 489 miles, transportation 60 cents. While from Pittsburgh to Philadelphia, 357 miles, the rate is 100 cents, or more than twice the rate per mile charged by any of those three roads named. What is taken say from New Castle, Pa., transported to Cleveland, a distance by canal of 124 miles for 7 cents; thence to Buffalo 206 miles by lake for 8 cts; thence to New York, being 325 miles by canal, and 150 miles by river, for 13 cents; total cost for 800 miles 25 cents per bushel, or an average of 3 cents per bushel for 100 miles. The expenses of unloading, loading or storage at either Cleveland or Buffalo amounts to only ¼ cent to 1 cent per bushel. Now suppose this wheat should be transported from New Castle to Philadelphia the expense would be about as follows: from New Castle to Pittsburgh 50 miles 5 cents per bushel, unloading, draying, etc., at Pittsburgh, 2 cents per bushel, transportation from Pittsburgh to Philadelphia 357 miles, at 65 cents per 100 lbs, 39 cents, whole cost 46 cents per bushel, for a distance of 407 miles, or nearly 12 cts per 100 miles, against 25 cents for 800 miles, or a trifle over 8 cents per 100 miles.

The miserable policy of requiring property to be drayed through Pittsburgh and the necessity for sacking grain in order to its safe transportal by the Pennsylvania improvements, while by the lake route to New York the grain is shipped in bulk, and handled by means of steam elevators, at a trifling expense, and without any necessity of draying, is among the many considerations that give to that route the almost entire trade in the grain of Ohio and the other western States, and takes from the cities of Pittsburgh and Philadelphia, an immense trade which their natural advantages of location would give them, did they pursue a corresponding liberal course of commercial policy in the management of their public improvements, which is pursued by the cities of New York and Boston.

Flour should be transported from Pittsburgh to Philadelphia for 50 cents per barrel. Wheat 15

cents per bushel, corn 12 cents. Butter, lard, pork, etc., from 85 to 50 cents per 100 lbs, and other articles in proportion. These rates would insure an immense business to the Central road—a trade to the cities of Philadelphia and Pittsburgh, of which their citizens can scarcely form any adequate conception. These prices for transportation would be fully equal in proportion to distance to the rates of charges by the New York and Boston roads.—Will not the cities of Philadelphia and Pittsburgh wake up to a spirit of enterprise and emulation corresponding with that of those other cities of this "great and glorious country," and reap the rich fruits which the harvests of nature has designed for them.—*Daily Pittsburgh Gazette.*

## Coal Trade.

## LEHIGH REGION.

The following is the official statement of the number of tons of anthracite coal sent to market from the Lehigh coal region for the last four years.

	1849.	1850.	1851.	1852.
Lehigh Co.....	379,285	424,258	480,823	*510,268
Beaver Mead'w	73,702	27,571	42,263	46,278
Hazleton.....	92,401	54,309	113,297	130,514
Diamond.....	11,356	12,099	36,712	41,597
Buck Mountain	85,819	103,937	104,456	104,207
Summit.....	102,599	43,793	119,577	139,692
Wilkesbarre..	19,590	32,153	25,072	41,989
Cranberry....	36,155	22,493	30,588	49,112
Colrain.....	....	2,075	39,513	37,781
E. Sugar Loaf.	....	....	....	12,566
Total .....	800,987	722,688	989,251	1,113,944

\* Including 80,432 tons from Room Run.

## SCHUYLKILL REGION.

The following shows the coal production for the last four years, in the region of the Schuylkill, and which finds an outlet through the Schuylkill Navigation and over the Reading railroad.

	1849.	1850.	1851.	1852.
Schuylkill.....	1,428,150	1,509,047	1,868,277	2,138,181
L. Schuyl.	174,657	211,960	310,367	324,984
Lackawana	454,240	543,886	788,485	922,897
Pine Grove	78,299	62,809	....	75,000
Lykens V.	25,000	30,000	53,150	60,000
Shamokin.	19,658	19,921	23,989	30,000
Del. & Sus.	....	....	20,000	33,400
Wyoming.	258,080	275,169	336,017	320,000
Total Sch.	2,438,184	2,723,732	3,400,225	3,914,442
" Lehigh.	800,987	722,688	989,251	1,113,944
Total.....	3,339,171	3,451,420	4,389,470	5,028,386

## Another Evidence of the Resources of the South.

Every few days our streets present a lively appearance from the influx of wagons, loaded with Copper Ore, on its way to New York. This ore, we understand comes from the Hiwassee mines, located in Polk county, Tenn., about five miles from the state lines of North Carolina and Georgia. This region of country is a primitive formation, and abounds in minerals.

The vein runs longitudinally, in a series of hills, in a north east and south west direction; they being a spur of the Allegheny range of mountains.

The ore is principally black oxide of copper, yielding, we understand, from ten to seventy per cent of pure metal.

The black oxide is found at a distance of about forty feet from the surface; the vein here being fifteen feet wide, on an average. Below the stratum of black oxide, the vein gradually increases in width, as you go down, and produces yellow sulphuret of copper. Several hundred tons have already been taken out of the mines.

The company is constructing a plank road from the mine, down the bank of the Ocoee river, to Cleveland.

Were our beds of iron, coal, marble, copper, &c., located in a section of country, where people have enterprise enough to work them, they would prove to be sources of wealth, far beyond the expectations of those who have never estimated their true value.—*Dillon (Ga.) Times.*



**A. N. GRAY, Cleveland, O.,**  
RECEIVER AND FORWARDER of Railroad  
Iron, Chairs and Spikes.  
Also, Cars, Locomotives, and all kinds of Machi-  
nery for Railroad purposes.  
Office next door to the Custom House, Main st.  
January 12, 1853.

**R. Groves & Sons,**  
SHEFFIELD, ENGLAND,  
MANUFACTURERS OF  
WARRANTED Cast Steel of superior quality for  
Tools, Machinery and Engineering purposes.  
Single and Double Shear, Blister, German, Spring  
and Sheet Steel of every description; also, Cast Steel  
Files of high reputation, specially adapted for the use  
of Machinists, and Saws and Edge Tools of all kinds.

Corporate mark!



CHAS. CONGREVE, Agent,  
58 Maldenlane, New York.

Stocks of the above goods constantly on hand.  
January 12, 1853.

### SISCOE BLAST FURNACE For Sale.

THIS FURNACE, situated in Westport, Essex  
Co., N. Y., on Lake Champlain, is capable of  
producing 3000 tons Pig Iron per annum. It is  
blown by a powerful steam engine, and another en-  
gine raises the stock, etc., etc. There are eight  
Kilns, which can make 500,000 bushels Charcoal  
per annum, connecting by Railroad with the Fur-  
nace, and nearly an acre of sheds for seasoning  
wood. One large Brick Mansion House, with ex-  
cellent Farm, one Brick Cottage, seventeen Houses  
for workmen, commodious Blacksmiths' and Car-  
penters' Shops, etc., etc., and about 1500 Acres of  
Land. The Furnace is situated on a large and  
convenient Dock; Wood for making Charcoal can  
be obtained cheaply in the neighborhood, and An-  
thracite coal from Rondout can be delivered at low  
rates. By the proposed Ship Canal from Lake  
Champlain to River St. Lawrence, coal could also  
be brought with great facility from Erie. The rich  
Magnetic Ore of Essex County, particularly that  
from the famous Port Henry Bed, can always be  
procured cheaply and in great abundance. The  
property will be sold on reasonable terms. Inquire  
of Messrs J. & L. TUCKERMAN, 69 West street,  
New York, or of F. H. JACKSON, No. 5 Liberty  
Square, Boston. 1m2

### LOW MOOR IRON.

W. M. BAILEY LANG, 9 Liberty Square, Boston,  
and 24 Broadway, New York, Sole Agent in  
the United States and Canadas for the Lowmoor  
Iron Co., is prepared to receive orders for this justly  
celebrated Iron, and offers for sale an assortment of  
the Round sizes which be now has in store, and which  
for strength, soundness and uniform quality, stands  
without a rival.

### Superior Cast Iron Gas and Water Pipes.

THE Subscriber is prepared to contract for the sup-  
ply of CAST IRON PIPES required by Gas or  
Water Companies, Corporations, etc., delivered in any  
Seaport in the Union, on reasonable terms. These  
Pipes are cast on the most improved principle by the  
best Founders in Scotland, from a superior quality  
of Pig Iron remelted, are guaranteed to resist a pres-  
sure of 300 lbs. to the square inch, or greater if ne-  
cessary, and to be soft enough to drill easily and freely.  
Full information regarding price, and references to  
parties in the United States now using the Pipes, can  
be obtained on application to the Agent in New York.

WILLIAM ROY, Junr.,  
21 Renfield st., Glasgow,  
Scotland.

J. M. EADIE, Agent,  
26 Front st., New York 1y50

### Railroad Iron.

5000 TONS Railroad Iron, weighing about 59  
lbs. per yard, "Erie" pattern of G. L. and  
"Crawshaw" manufacture, now on the way from the  
shipping ports in Great Britain to this port, for sale by  
P. CHOUTEAU, Jr., SANFORD & CO.,  
No. 51 New street.

December 4, 1852.

4t

SIMEON DRAPER, No. 46 Pine-st., offers for  
sale, a variety of RAILROAD BONDS and  
STOCKS; also CITY, TOWN and COUNTY  
BONDS, among which are—

1st Mortgage Convertible—  
7 per ct. bonds of Canandaigua and Corning  
R.R., payable in.....New York, 1860  
Do. Buffalo, Corning and New York do.....1867  
Do. Western Vermont Railroad.....do. 1861-71  
Do. Evansville and Illinois.....do.....1862  
8 do. Michigan Central.....Boston, 1860  
Do. Peoria and Oquawka.....New York, 1862  
1st Mortgage—  
7 per ct. bonds, Corning & Blossburg do.....1871  
Do. Mansfield and Sandusky.....do.....1860  
7 per ct. Vermont Valley.....do.....1860  
Do. Troy and Bennington.....Troy, N. Y. 1861  
Do. New Jersey Central.....New York, 1860-70  
Do. Dauphin and Susq. Coal Co. do.....1871  
Do. Brunswick Canal Co.....do.....1857

Also, second mortgage bonds of many of the above  
companies, and—

7 per ct. bonds Saratoga and Wash. N. York, 1862  
Do. Troy and Boston.....do.....1864  
Do. Muscogee Railroad.....Savannah, 1862  
Do. Huron and Oxford.....N. York, 1862  
Also, Georgia 7 per ct. State stocks,  
interest payable semi-annually.....do.....1872  
City of Savannah 7 per cent. bonds,  
interest payable semi-annually.....do. 1870-76

7 per ct. bonds of the Town of Huron,  
Erie county, Ohio.....do.....1861  
10 per ct. City of Keokuk, Iowa, Keokuk, 1863  
6 per cent, City of Memphis.. Philadelphia, 1880  
10 per cent. City of San Francisco, San Fran. 1870  
12 " " Benicia, California, N.Y. 1855  
12 " " Sacramento, do. Sacramento.  
7 per cent. Atlantic Steamship Co.. N. York, 1855  
12 per cent. Improvement of the  
State of Wisconsin for improve-  
ment of Fox River.....do.....1862

Troy and Rutland railroad Stock, with guarantee  
of 4 per cent. dividend and one half surplus profits  
of this and Rutland and Wash. R. R.

Rutland and Whitehall Stock, with guarantee of  
4 per ct. div'd by Saratoga and Washington R. R.  
Also, Stock of the Cambria Iron Company.

Stock in the Western Vermont R. R. Co.  
Stock in the Mad River R. R. Co.  
Stock in the Buffalo, Corning and New York  
R. R. Co.

Stock in the Mansfield and Sandusky R.R. Co.  
Stock in the Southern Bank of Kentucky.  
Stock in the Mechanic's Bank of N. Y.  
Stock in the East River Insurance Co.

### The Cold Spring Iron Works, INCORPORATED IN 1848.

IN the Town of Otis, County Berkshire, Massachu-  
setts, manufactures CAR AXLES, and all kinds  
of WROUGHT IRON used in the manufacture of  
LOCOMOTIVES and CARS; also, BAR IRON of  
all descriptions. Particular attention is paid to the  
manufacture of CAR AXLES, and the Works being  
situated in a region of WOOD and CHARCOAL,  
with which their Axles are exclusively made, the Com-  
pany feel confident they can furnish an article equal,  
if not superior, in quality and finish to any in the  
market. They solicit the orders of RAILROAD  
CORPORATIONS and CAR BUILDERS, and prom-  
ise they shall be promptly attended to; and execut-  
ed on terms as advantageous as can be had elsewhere.

They refer to—  
John Kinsman, Esq., Superintendent Eastern Rail-  
road, Salem, Mass.

A. T. Peirce, Esq., Car Builder, Norwich, Conn.  
E. T. Osborn, Esq., Superintendent of the Mad Riv-  
er and Lake Erie Railroad, Sandusky City, Ohio.  
W. W. Wetherell, Car Builder, " "

Address HENRY MELLUS, Agent,  
Boston, Mass.  
or, GEO. W. PRESCOTT, Sup't,  
Otis, Mass.

November, 12, 1852. 1y

### Railroad Iron.

5000 TONS, weighing about 55 lbs. per yard,  
now on the way from Great Britain to  
New Orleans, for sale by  
P. CHOUTEAU, Jr., SANFORD & CO.,  
No. 51 New street.

December 4, 1852,

4t

**The Cambria Iron Company,**  
ORGANIZED under the laws of Pennsylvania,  
with a capital of \$1,000,000, propose embark-  
ing in the manufacture of Railroad Iron, at John-  
stown, Pennsylvania. The location they have se-  
cured offers advantages superior, it is confidently  
believed, to any other in this country. Iron Ores,  
semi-bituminous Coal, Limestone, and nearly every  
article required for the manufacture of Iron, exist,  
in inexhaustible quantities, on the spot; and these  
deposits are now worked, and the minerals deliv-  
ered, cheaper than at any other known point now  
occupied for the manufacture of Iron. The Penn-  
sylvania Canal and Central Railroad pass through  
the property, and cross each other at the spot where  
the mineral veins are most thoroughly opened out;  
and which location, for its other advantages for fa-  
cility of manufacturing, and vicinity to a populous  
borough, has been selected for the establishment of  
Railroad Iron Works, and for the erection of other  
Blast Furnaces, in addition to those now in opera-  
tion.

The attention of capitalists disposed to embark  
in an enterprise which offers a remunerating profit,  
even on the low prices of iron current before the  
rise of the last six months, and which promises to  
be very lucrative while anything like present rates  
prevail, and also of Railroad Companies desirous  
of making arrangements for Iron Rails to be deliv-  
ered in 1853, is called to this enterprise.

Out of the capital named above, the sum of  
\$360,000 has been devoted to the purchase of about  
30,000 acres of land, upon which there are six blast  
furnaces, which cost, including the personal prop-  
erty accompany them, \$350,000. Three of these  
furnaces are now in successful operation, and by  
next spring, with an outlay of about \$6,000, the  
other three can go into blast; and at the present  
price of pig iron, these six charcoal furnaces would  
realize a net profit of six per cent on \$1,000,000  
capital.

The company contemplate erecting four more  
blast furnaces, for smelting with coke the iron ores  
at Johnstown, and also works for manufacturing  
railroad iron. To do this, they will require sub-  
scriptions in all to the amount of \$600,000, and to  
carry on most profitably the manufacture and dis-  
posal of rails, the whole chartered capital should  
be raised. Subscription lists, providing that no  
subscription shall be binding unless bona fide sub-  
scribers for the amount of \$600,000 are obtained  
by the 1st January next, and pamphlets descriptive  
of the advantages of the locality and estimates of  
costs, can be had of the undersigned.

D. M. WILSON, Newark,  
EDWARD F. GRANT, New York,  
SAMUEL H. JONES, Philadelphia,  
JOHN HARTSHORN, Boston,  
T. F. SECOR, New York,  
G. S. KING, Johnstown,  
P. SHOENBUGER, Pittsburg,  
RHEY, MATHEWS & CO., Pittsburg,  
or at the office of the Provisional Committee, at  
SIMEON DRAPER'S, 46 Pine st.

The subscriber is prepared to enter into contracts  
to deliver RAILROAD IRON to Companies re-  
quiring it in 1853. SIMEON DRAPER.

### Iron.

200 Tons Fishkill Charcoal Iron for sale on  
reasonable terms, also from 1000 to 5000  
tons Fishkill Hematite Ore—delivered at Pough-  
keepsie or New York. Samples of the ore may be  
seen at the store of Messrs. Hoffman, Bailey & Co.,  
No. 62 Water st., New York. Enquire by letter to  
NORMAN M. FINLAY,

Poughkeepsie, Dutchess county, N. Y.  
July 10, 1851.

### A. Whitney & Son, PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels  
for Cars and Locomotives. Also furnish Wheels  
fitted complete on best English and American Rolled  
and American Hammered Axles. 31tf

### Fire Bricks.

SCOTCH Patent—for sale in lots to suit purchas-  
ers, by  
G. O. ROBERTSON,  
135 Water street, corner of Pine,  
New York, November 19, 1852.

**Volcano Quartz Mining Co.**VOLCANOVILLE, EL DORADO COUNTY,  
CALIFORNIA.

**BOOKS** for subscription to \$75,000 of the stock of this company are now open at the office of the company, 78 BROADWAY, New York.

The uncommonly rich claims of this company hold out inducements, to those who are disposed to invest capital in quartz mining in California, not surpassed, if, indeed, *equaled*, by those of any other company in that state.

The extraordinary richness of our quartz, as was witnessed by *thousands* at the late *Fair of the American Institute*, and the extent of our claims, together with the peculiarly favorable location for economical working upon a large scale, will ensure the *most ample and satisfactory* returns upon the investment.

It is well understood by practical men that, with machinery working *twenty tons* of quartz, paying *two cents* per lb., large profits will be realized upon each day's work. It is the intention of the company to obtain machinery sufficient to work *fifty tons* per day, and to work it in the most economical manner, by which they feel confident of being able, from their stock which will yield from *two cents* to *twenty dollars* to the lb., to make returns to their shareholders which will not only satisfy, but surprise them.

It will be seen, by reading the pamphlet, containing the *charter*, the laws of California, and the details of our plans of operation, that our estimates are based upon *two cents* per lb., and the expenses of working the mill are but, at present *high prices* for labor, while it is well known to all who reflect upon the matter that, as the cost of labor shall be reduced, the income will be materially enhanced.

If we work 40 tons per day, and yet *two cents* per lb., it will yield \$16, while *three, four, or five cents* per lb., would give a proportionate increase of receipts, the expenses of working the mill would not be increased a dollar, and will be less than \$470 a day.

Subscriptions can be made by mail, enclosing, *ten per cent* on the amount, of the balance, *twenty per cent* to be paid on the 29th of Nov. inst., and *seventy per cent* on the 29th day of December next, when certificates of stock will be issued.

Pamphlets, containing the statute of California in relation to corporations, the rules and regulations of our locality, the charter and by-laws of the Co., together with much other interesting and useful matter, including a map of a portion of the northern mining regions may be had gratis at the office of the company, No. 78 Broadway, or by mail on application, (postage paid.)

## TRUSTEES OR DIRECTORS.

NICHOLAS DEAN,  
ROBERT M. STRATTON,  
NATHANIEL CONKLING,  
D. K. MINOR,  
JOB S. HEARN,  
SUMNER WHITNEY,  
BENJAMIN C. DONNELLAN,  
JAMES CLOUDSLEY  
JAMES ALLEN,

} of New York.

} of California.

D. K. MINOR, President,  
JAMES CLOUDSLEY, Vice President.  
NICHOLAS DEAN, Treasurer.  
NATHANIEL CONKLING, Secretary.  
New York, Oct. 25, 1852.

**To Railroad Co's, Locomotive Builders and Engineers.**

**THE** undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the *only reliable Gauge* yet introduced.

CHAS. W. COPELAND,  
Consulting Engineer, 64 Broadway.  
Aug. 29, 1852.

**Dudley B. Fuller & Co.,**  
**IRON COMMISSION MERCHANTS,**  
No. 139 GREENWICH STREET,  
NEW YORK.

**To Railroad Contractors.**

**SEALED PROPOSALS**, addressed to either of the undersigned, will be received at Hillsborough, Highland county, Ohio, until the 1st day of February next, at noon.

For the Graduation and Masonry of the Middle Division of the Cincinnati, Hillsborough and Parkersburg Railway, extending from Hillsborough, Highland county, to a point near Jackson, Jackson county, Ohio, about 56 miles.

The line will be ready for examination early in January, and Profiles and Specifications of the work will be exhibited at the Engineer's office, in Hillsborough, for one week prior to the 1st day of February.

This Railway forms the recognized continuation across Ohio, of the Baltimore and Ohio, and North Western Virginia Railways, and being located as a link, in the great through line between Baltimore and St. Louis, will be found in every way worthy of the attention of able and enterprising contractors.

The remainder of the line to the Ohio river will be ready for contract about the 1st day of May next. JAMES M. TRIMBLE, President.

ELWOOD MORRIS, Chief Engineer.

**Notice to Contractors.***Alleghany Valley Railroad Lettings.*

**SEALED Proposals** will be received at the Company's Office, in Fourth street, Pittsburg, until the 22nd day of February, 1853, for doing the Grading, Masonry and Bridging on the portion of said road, between Pittsburg and Kittanning, Armstrong County, a distance of 42 miles. The line will be divided into Sections of about one mile in length, and bids may be made for one or more or all of said sections.

Plans, Profiles and Specifications will be ready for inspection on and after the fifth day of February.

Proposals will be received for the Grading, Masonry and bridging, and also for the *superstructure*, and finishing said 42 miles, complete, (except furnishing iron.)

Bids will be received and considered, for the entire work, (except furnishing iron,) from Pittsburg to the New York State line.

Satisfactory references will be required from bidders not personally known to the Company.

For further information, application may be made personally, or by letter, to Hon. William F. Johnston, President of the Company, or to George R. Eichbaum, Esq., Associate Engineer, or to the subscriber,

W. MILNOR ROBERTS, Chief Engineer.

By order of the Board of Managers,  
Office of the Alleghany Valley Railroad Company, Pittsburg, December 20th, 1852.

**LOW MOOR AXLES,**

A **SUPERIOR** Article for Railroad Cars, supplied by the Manufacturers' Agent - WM. BAILEY LANG, 9 Liberty Square, Boston, and 24 Broadway, New York.

**CAUTION.**

**RAILROAD** Companies, and the public generally are hereby cautioned against purchasing Richardson's Patent Oil Cups, or the right to use the same, except of the undersigned, Proprietor of the Patent, or of some one acting under his authority. Communications addressed to him at Westminster, Vt., will be promptly attended to. E. DEWOLF, Jr.  
Oct. 2, 1852. 1y\*

**To Civil Engineers and Surveyors.**

A **CIVIL ENGINEER** and Surveyor of very great experience in every detail of locating designing and constructing Public Works, especially Railroads, is desirous of a situation, he has been engaged practically for the past sixteen years and can produce the most satisfactory testimonials. Address D. F. Case of Geo. Gilchrist.  
1 m-52 422 Washington-st. N. Y.

**\$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF**

the **NEW-CASTLE and RICHMOND RAILROAD.**—The undersigned offer for sale **TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS** for \$1,000 each, of the **NEW-CASTLE and RICHMOND RAILROAD COMPANY**, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the **FIRST AND ONLY LIEN** upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is \$509,400. The stock applicable to the construction of the road from Richmond to New Castle is \$250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for their security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.  
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

**Etna Safety Fuse.**

**THIS** superior article for igniting the charge in wet or dry blasting, made with DUPONT'S best powder, is kept for sale at the office and depot of

**REYNOLDS & BROTHER,**

Manufacturers,  
No. 85 Liberty St.  
NEW YORK.

And in the principal cities and towns in the U. States.  
The Premium of the **AMERICAN INSTITUTE** was awarded to the *Etna Safety Fuse* at the late Fair held in this city.  
November 3, 1849. 1v

**Gerard Ralston,**

21 TOKEN HOUSE YARD, LONDON,

OFFERS HIS SERVICES FOR THE

**PURCHASE AND SALE OF  
AMERICAN SECURITIES,  
COLLECTION OF DIVIDENDS,  
DEBTS, LEGACIES, ETC.,**  
And for the Purchase and Inspection of  
**Railroad Iron, Chairs, or**  
any kind of Machinery.

## REFERENCES:

Messrs Palmer, McKillop, Dent & Co., London.  
" George Peabody & Co, London.  
" Curtis, Bouve & Co, Boston.  
Richard Irvin, Esq., New York.  
Robert Ralston, Esq., Philadelphia.  
C. C. Jamieson, Esq., Baltimore.